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=> d his

     (FILE 'HOME' ENTERED AT 07:00:54 ON 08 JAN 2002)
               SET COST OFF

     FILE 'HCAPLUS' ENTERED AT 07:01:06 ON 08 JAN 2002
               E HAMILTON N/AU
L1           21 S E3,E5
L2            3 S E19,E20
               E JUVENON/PA,CS
L3            3 S E3-E8
L4           24 S L1-L3

     FILE 'REGISTRY' ENTERED AT 07:08:40 ON 08 JAN 2002
L5            1 S 1200-22-2
               E C8H14O2S2/MF
L6           17 S E3 AND S2C3/ES
L7           13 S L6 AND 3
L8            6 S L7 AND PENTANOIC
L9            5 S L8 NOT LABELED
               SEL RN
L10         133 S E1-E5/CRN
L11          34 S L10 AND SALT
L12          15 S L11 NOT COMPD
L13          13 S L12 AND 1/NR
L14           3 S 541-15-1 OR 541-14-0 OR 406-76-8
L15          41 S (541-15-1 OR 541-14-0 OR 406-76-8)/CRN
L16          22 S L15 NOT COMPD
L17           1 S 303-98-0
L18           1 S 57-00-1

     FILE 'HCAPLUS' ENTERED AT 07:17:21 ON 08 JAN 2002
L19        1395 S L9 OR L13
L20       41518 S ANTIOXIDANT#/CW
L21       93716 S ANTIOXID? OR ANTI OXID?
L22        1533 S THIOCTIC ACID OR ALPHA LIPOIC ACID
L23        2189 S LIPOIC ACID
L24       96356 S L19-L23
L25        3983 S L14
L26        7730 S CARNITINE
L27        8373 S ?CARNITIN?
L28         191 S L24 AND L25-L27

     FILE 'REGISTRY' ENTERED AT 07:20:45 ON 08 JAN 2002
L29           1 S 3040-38-8
               E C9H17NO4/MF
L30          11 S E3 AND PROPANAMINIUM AND ACETYLOXY
L31          10 S L30 AND 2 AND 3
L32           3 S L31 NOT (D/ELS OR 13C# OR 11C# OR LABELED)
               SEL RN
L33           6 S E1-E3/CRN
L34           1 S L33 AND C59H90O4
L35           1 S L33 AND CL
L36           4 S L29,L32,L35

     FILE 'HCAPLUS' ENTERED AT 07:24:31 ON 08 JAN 2002
L37          47 S L36 AND L24
L38           0 S L34 AND L24
L39           1 S L34
L40         191 S L28,L37
L41        1686 S COENZYME Q

     FILE 'REGISTRY' ENTERED AT 07:29:04 ON 08 JAN 2002
               E COENZYME /CN
               E COENZYME Q/CN
L42           1 S E3
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Point of Contact:
Jan Delaval
Librarian-Physical Sciences
CM1 1E07 Tel: 308-4403

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L43          11 S E7,E10,E22,E24,E25,E31,E32,E35,E36,E37,E13
L44          12 S L42,L43
                SEL RN
L45          33 S E1-E12/CRN
L46          12 S L17,L44

     FILE 'HCAPLUS' ENTERED AT 07:34:03 ON 08 JAN 2002
L47          35 S L44 AND L40
L48          61 S (COENZYME OR CO ENZYME OR COE#) AND L40
L49          38 S L48 AND Q##
L50           8 S L40 AND L41
L51          44 S L47,L49,L50
L52          14 S L51 AND (L18 OR CREATIN?)
                E UBIQUINONE/CT
                E E8+ALL
L53        4296 S E6+NT
L54        2674 S E6/BI
L55        6781 S UBIQUINONE
L56          42 S L40 AND L53-L55
L57          49 S L51,L56
L58          15 S L57 AND (L18 OR CREATIN?)
L59          15 S L52,L58
L60           7 S L57 AND (CARBOHYDRATE OR ?SACCHARID?)
L61          21 S L57 AND (PROTEIN OR AMINOACID OR AMINO ACID)
L62          13 S L57 AND (FAT OR OIL OR ?GLYCER?)
L63           0 S L57 AND (?FIBER? OR ?FIBRE? OR ?FIBROUS?)
L64           0 S L57 AND ROUGH?
L65           7 S L60 AND L61,L62
L66           4 S L65 AND (17 OR 18)/SC,SX
L67           6 S L60-L62 AND L59
L68           5 S L67 AND (17 OR 18)/SC,SX
L69           7 S L66,L68
L70           3 S L4 AND L40
L71           3 S L70 AND L57
L72          10 S L69,L71
L73           8 S L72 AND L59
L74           2 S L72 NOT L73
L75          29 S L57 AND (17 OR 18)/SC,SX
L76          20 S L75 NOT L72
L77           5 S L76 AND (13 OR 14)/SC,SX
L78          15 S L76 NOT L77
L79          10 S L78 NOT (TOPICAL? OR SPLEEN OR COSMETIC? OR PARADIGM)/TI
L80           9 S L79 NOT FATTY/TI
L81          17 S L73,L80
L82          15 S L81 AND L19,L14,L17,L18,L44
L83          17 S L81 AND (LIPOIC OR THIOCTIC OR TIOCTIC OR ?CARNITIN? OR UBIQU
L84          17 S L81-L83
L85           3 S L4 AND L84
L86          17 S L84,L85
                SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 07:54:30 ON 08 JAN 2002
L87           5 S E1-E5

=> fil reg
FILE 'REGISTRY' ENTERED AT 07:55:16 ON 08 JAN 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2002 American Chemical Society (ACS)

STRUCTURE FILE UPDATES:     6 JAN 2002  HIGHEST RN 380539-05-9
DICTIONARY FILE UPDATES:    6 JAN 2002  HIGHEST RN 380539-05-9

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

  Please note that search-term pricing does apply when
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conducting SmartSELECT searches.

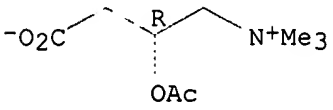
Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d ide can tot l87

L87 ANSWER 1 OF 5 REGISTRY COPYRIGHT 2002 ACS
RN **3040-38-8** REGISTRY
CN 1-Propanaminium, 2-(acetyloxy)-3-carboxy-N,N,N-trimethyl-, inner salt, (2R)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1-Propanaminium, 2-(acetyloxy)-3-carboxy-N,N,N-trimethyl-, inner salt, (R)-
CN Ammonium, (3-carboxy-2-hydroxypropyl)trimethyl-, hydroxide, inner salt, acetate, L- (8CI)
OTHER NAMES:
CN (-)-Acetylcarnitine
CN (R)-Acetylcarnitine
CN Acetyl-L-(-)-carnitine
CN Acetyl-L-carnitine
CN Acetylcarnitine
CN ALCAR
CN L-Acetylcarnitine
CN L-Carnitine acetyl ester
CN L-O-Acetylcarnitine
CN Levocarnitine acetyl
CN Nicetile
CN O-Acetyl-L-carnitine
CN O-Acetylcarnitine
FS STEREOSEARCH
DR 461-77-8, 541-68-4, 3624-25-7, 74832-89-6
MF C9 H17 N O4
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DRUGNL, DRUGU, DRUGUPDATES, EMBASE, IPA, MRCK*, PHARMASEARCH, PROMT, RTECS*, TOXCENTER, TOXLIT, USPATFULL
(*File contains numerically searchable property data)
Other Sources: WHO

Absolute stereochemistry.



587 REFERENCES IN FILE CA (1967 TO DATE)
11 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
591 REFERENCES IN FILE CAPLUS (1967 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 136:19426

REFERENCE 2: 136:16810

REFERENCE 3: 136:5161

REFERENCE 4: 136:5160

REFERENCE 5: 136:675

REFERENCE 6: 136:569

REFERENCE 7: 135:362560

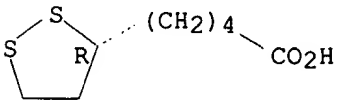
REFERENCE 8: 135:293963

REFERENCE 9: 135:286774

REFERENCE 10: 135:283212

L87 ANSWER 2 OF 5 REGISTRY COPYRIGHT 2002 ACS
RN **1200-22-2** REGISTRY
CN 1,2-Dithiolane-3-pentanoic acid, (3R)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,2-Dithiolane-3-pentanoic acid, (R)-
CN 1,2-Dithiolane-3-valeric acid, (+)- (8CI)
OTHER NAMES:
CN (R)-(+)-.alpha.-Lipoic acid
CN (R)-.alpha.-Lipoic acid
CN (R)-Lipoic acid
CN .alpha.-(+)-Lipoic acid
CN .alpha.-Lipoic acid
CN d-Thioctic acid
CN Lipoic acid
CN R-(+)-Thioctic acid
FS STEREOSEARCH
MF C8 H14 O2 S2
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DIOGENES, DRUGNL, DRUGUPDATES, EMBASE, HODOC*, IFICDB, IFIUDB, IPA, MEDLINE, MRCK*, NAPRALERT, PROMT, TOXCENTER, TOXLIT, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

501 REFERENCES IN FILE CA (1967 TO DATE)
39 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
504 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:25127

REFERENCE 2: 136:24967

REFERENCE 3: 136:19395

REFERENCE 4: 136:11283

REFERENCE 5: 136:5244

REFERENCE 6: 136:5187

REFERENCE 7: 136:5081

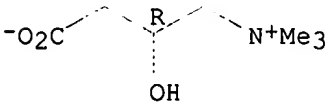
REFERENCE 8: 136:4057

REFERENCE 9: 135:376736

REFERENCE 10: 135:366762

L87 ANSWER 3 OF 5 REGISTRY COPYRIGHT 2002 ACS
RN **541-15-1** REGISTRY
CN 1-Propanaminium, 3-carboxy-2-hydroxy-N,N,N-trimethyl-, inner salt, (2R)-(9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1-Propanaminium, 3-carboxy-2-hydroxy-N,N,N-trimethyl-, hydroxide, inner salt, (R)-
CN Ammonium, (3-carboxy-2-hydroxypropyl)trimethyl-, hydroxide, inner salt, L-(8CI)
OTHER NAMES:
CN (-)-Carnitine
CN (-)-L-Carnitine
CN (R)-Carnitine
CN 1-Propanaminium, 3-carboxy-2-hydroxy-N,N,N-trimethyl-, inner salt, (R)-
CN Carniking 50
CN Carnitine
CN Carnitine, (-)-
CN L-(-)-Carnitine
CN l-Carnitine
CN L-Carnitine
CN Levocarnitine
CN ST 198
CN Vitamin BT
FS STEREOSEARCH
DR 7634-98-2, 101512-81-6, 4209-27-2
MF C7 H15 N O3
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGNL, DRUGU, DRUGUPDATES, EMBASE, HODOC*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, PHAR, PROMT, RTECS*, TOXCENTER, TOXLIT, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry. Rotation (-).



3640 REFERENCES IN FILE CA (1967 TO DATE)
740 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3647 REFERENCES IN FILE CAPLUS (1967 TO DATE)
11 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 136:31050

REFERENCE 2: 136:25127

REFERENCE 3: 136:16810

REFERENCE 4: 136:11219

REFERENCE 5: 136:11216

REFERENCE 6: 136:11214

REFERENCE 7: 136:11129

REFERENCE 8: 136:5200

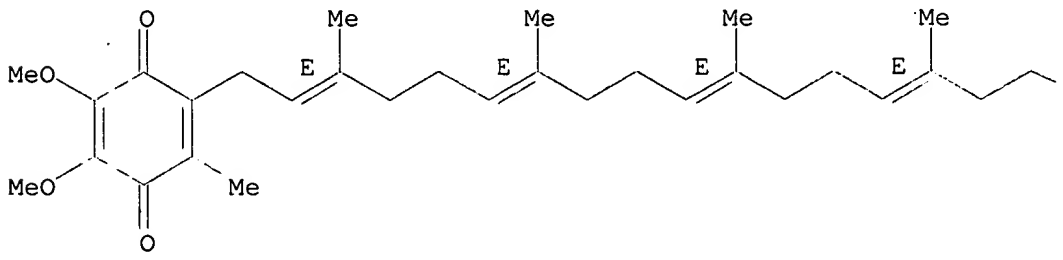
REFERENCE 9: 136:5185

REFERENCE 10: 136:5161

L87 ANSWER 4 OF 5 REGISTRY COPYRIGHT 2002 ACS
RN **303-98-0** REGISTRY
CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaenyl]-5,6-dimethoxy-3-methyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2,5-Cyclohexadiene-1,4-dione, 2-(3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaenyl)-5,6-dimethoxy-3-methyl-, (all-E)-
CN Coenzyme Q10 (6CI)
CN p-Benzoquinone, 2-(3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaenyl)-5,6-dimethoxy-3-methyl- (8CI)
OTHER NAMES:
CN Bio-Quinon
CN CoQ10
CN Ensorb
CN Neuquinon
CN Neuquinone
CN Ubidecarenone
CN Ubiquinone 10
CN Ubiquinone 50
CN Ubiquinone Q10
FS STEREOSEARCH
DR 13448-14-1, 55870-43-4
MF C59 H90 O4
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NAPRALERT, PHARMASEARCH, PIRA, PROMT, RTECS*, TOXCENTER, TOXLIT, USAN, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Double bond geometry as shown.

PAGE 1-A



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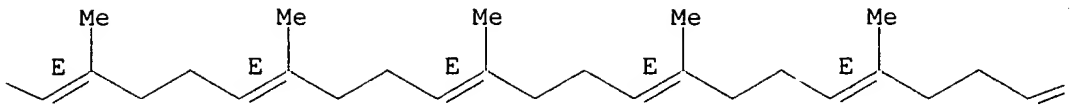

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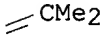


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2025 REFERENCES IN FILE CA (1967 TO DATE)
21 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2029 REFERENCES IN FILE CAPLUS (1967 TO DATE)
51 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 136:24959

REFERENCE 2: 136:10790

REFERENCE 3: 136:5244

REFERENCE 4: 136:5161

REFERENCE 5: 136:5160

REFERENCE 6: 136:5081

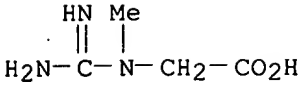
REFERENCE 7: 136:675

REFERENCE 8: 136:546

REFERENCE 9: 135:376781

REFERENCE 10: 135:376736

L87 ANSWER 5 OF 5 REGISTRY COPYRIGHT 2002 ACS
RN **57-00-1** REGISTRY
CN Glycine, N-(aminoiminomethyl)-N-methyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Creatine (8CI)
OTHER NAMES:
CN Methylguanidoacetic acid
CN N-Methyl-N-guanylglycine
CN Phosphagen
FS 3D CONCORD
MF C4 H9 N3 O2
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM*, DIOGENES, DRUGU, EMBASE, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PHARMASEARCH, PROMT, SPECINFO, TOXCENTER, TOXLIT, TULSA, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3117 REFERENCES IN FILE CA (1967 TO DATE)
67 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3118 REFERENCES IN FILE CAPLUS (1967 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 136:19439

REFERENCE 2: 136:18811

REFERENCE 3: 136:11129

REFERENCE 4: 136:6344

REFERENCE 5: 136:3490

REFERENCE 6: 136:2403

REFERENCE 7: 136:757

REFERENCE 8: 135:370157

REFERENCE 9: 135:368784

REFERENCE 10: 135:368780

=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 07:55:35 ON 08 JAN 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907 - 8 Jan 2002 VOL 136 ISS 2
FILE LAST UPDATED: 7 Jan 2002 (20020107/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

HCAplus now provides online access to patents and literature covered in CA from 1907 to the present. Bibliographic information and abstracts were added in 2001 for over 3.8 million records from 1907-1966.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

```
=> d all tot l86

L86  ANSWER 1 OF 17  HCAPLUS  COPYRIGHT 2002 ACS
AN   2001:885660  HCAPLUS
DN   136:5160
TI   Dietary supplement with antioxidant activity comprising an
     alkanoyl carnitine and a combination of polyphenols extracted
     from trees or shrubs
IN   Gaetani, Franco
PA   Sigma-Tau Healthscience S.P.A., Italy
SO   PCT Int. Appl., 15 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
IC   ICM  A23L001-30
     ICS  A61K035-78; A61K031-35
CC   17-14 (Food and Feed Chemistry)
     Section cross-reference(s): 63
FAN.CNT 1
     PATENT NO.         KIND  DATE          APPLICATION NO.  DATE
     ---------------    ----  ------------  ---------------  --------
PI   WO 2001091589      A1    20011206      WO 2001-IT261    20010523
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
             HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
             RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
             VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI IT 2000-RM298      A     20000530
AB   A health food/dietary supplement with antioxidant activity
     comprises an alkanoyl carnitine and a combination of polyphenols
     extd. from trees or shrubs.  Thus, a supplement may contain 500 mg
     isovaleryl L-carnitine and 100 mg maritime pine bark ext.
ST   carnitine deriv polyphenol diet supplement; antioxidant
     health food carnitine deriv polyphenol
IT   Pine (Pinus)
        (Finnish pine; antioxidant dietary supplement comprising
        alkanoyl carnitine and polyphenols from trees or shrubs)
IT   Antioxidants
     Bark
     Beech (Fagus grandifolia)
     Beech (Fagus sylvatica)
     Chestnut (Castanea sativa)
     Dietary energy
     Douglas fir
     Fagaceae
     Forsythia
     Health food
     Hemlock (Tsuga canadensis)
     Oak (Quercus robur)
     Oleaceae
     Pinaceae
     Pine (Pinus massoniana)
     Pine (Pinus pinaster)
     Plant (Embryophyta)
     Spruce (Picea abies)
     Tree
        (antioxidant dietary supplement comprising alkanoyl
        carnitine and polyphenols from trees or shrubs)
IT   Amino acids, biological studies
       Coenzymes
```

Mineral elements, biological studies
Vitamins
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(**antioxidant** dietary supplement comprising alkanoyl **carnitine** and polyphenols from trees or shrubs)

IT Nervous system
(disease, prevention; **antioxidant** dietary supplement comprising alkanoyl **carnitine** and polyphenols from trees or shrubs)

IT Learning
(disorder, prevention; **antioxidant** dietary supplement comprising alkanoyl **carnitine** and polyphenols from trees or shrubs)

IT Phenols, biological studies
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polyphenols, nonpolymeric, from trees or shrubs; **antioxidant** dietary supplement comprising alkanoyl **carnitine** and polyphenols from trees or shrubs)

IT Aging, animal
Blood vessel, disease
Heart, disease
Immunodeficiency
(prevention; **antioxidant** dietary supplement comprising alkanoyl **carnitine** and polyphenols from trees or shrubs)

IT Diet
(supplements; **antioxidant** dietary supplement comprising alkanoyl **carnitine** and polyphenols from trees or shrubs)

IT 50-81-7, Vitamin C, biological studies 59-43-8, Vitamin B1, biological studies **303-98-0**, **Coenzyme Q10** 557-04-0, Magnesium stearate 1406-18-4, Vitamin E 3211-76-5, L-Selenomethionine 7235-40-7, .beta.-Carotene 8059-24-3, Vitamin B6 11032-50-1, Vitamin PP 14281-83-5, Zinc glycinate
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(**antioxidant** dietary supplement comprising alkanoyl **carnitine** and polyphenols from trees or shrubs)

IT **541-15-1**, L-**Carnitine** **541-15-1D**, L-**Carnitine**, salts **3040-38-8**, Acetyl L-**carnitine** **3040-38-8D**, Acetyl L-**carnitine**, salts 20064-19-1, Propionyl L-**carnitine** 20064-19-1D, Propionyl L-**carnitine**, salts 25576-40-3, Butyryl L-**carnitine** 25576-40-3D, Butyryl L-**carnitine**, salts 31023-24-2, Isovaleryl L-**carnitine** 31023-24-2D, Isovaleryl L-**carnitine**, salts 40225-14-7, Valeryl L-**carnitine** 40225-14-7D, Valeryl L-**carnitine**, salts
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**antioxidant** dietary supplement comprising alkanoyl **carnitine** and polyphenols from trees or shrubs)

RE.CNT 3
RE
(1) Masquelier, J; US 4698360 A 1987 HCAPLUS
(2) Sigma Tau Healthscience Spa; WO 0000183 A 2000 HCAPLUS
(3) Sigma Tau Healthscience Spa; WO 0103683 A 2001 HCAPLUS

L86 ANSWER 2 OF 17 HCAPLUS COPYRIGHT 2002 ACS
AN 2001:833798 HCAPLUS
DN 135:343719
TI Performance-enhancing dietary supplement
IN Hastings, Carl W.; Barnes, David J.; Daley, Christine A.
PA Hastings, Carl W, USA
SO U.S. Pat. Appl. Publ., 5 pp.
CODEN: USXXCO
DT Patent
LA English
IC ICM A61K038-00

ICS A61K047-00; A61K009-68; A61K009-28; A61K009-70
NCL 424439000
CC **17-14** (Food and Feed Chemistry)
Section cross-reference(s): **18**
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001041187	A1	20011115	US 1998-175748	19981020

AB A dietary supplement for enhancing phys. performance of human subjects was developed. The supplement in dry, finely-divided form includes as a major ingredient a soy **protein** isolate contg. at least 80 **protein** on a moisture-free basis with lesser amts. of **carbohydrate**, free form amino acids, medium chain **triglycerides**, **creatine** monohydrate, l-**carnitine**, grape seed ext., **coenzyme Q10**, piper nigrum ext., and **alpha lipoic acid**. The supplement also includes minor amts. of conjugated linoleic acid and phosphatidylserine/phosphatidylcholine complex.

ST dietary supplement soy **protein** phys performance

IT Pepper (Piper nigrum)
(ext.; performance-enhancing dietary supplement)

IT Flavones
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(isoflavones; performance-enhancing dietary supplement)

IT **Glycerides**, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(medium-chain; performance-enhancing dietary supplement)

IT Flavoring materials
(performance-enhancing dietary supplement)

IT **Proteins**, general, biological studies
RL: BOC (Biological occurrence); BIOL (Biological study); OCCU (Occurrence)
(performance-enhancing dietary supplement)

IT **Amino acids**, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(performance-enhancing dietary supplement)

IT **Carbohydrates**, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(performance-enhancing dietary supplement)

IT Lecithins
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(performance-enhancing dietary supplement)

IT Phosphatidylcholines, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(performance-enhancing dietary supplement)

IT Phosphatidylserines
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(performance-enhancing dietary supplement)

IT Grape
(seed ext.; performance-enhancing dietary supplement)

IT **Proteins**, general, biological studies
RL: BPR (Biological process); FFD (Food or feed use); BIOL (Biological study); PROC (Process); USES (Uses)
(soybean, isolate; performance-enhancing dietary supplement)

IT Diet
(supplements; performance-enhancing dietary supplement)

IT 56-40-6, Glycine, biological studies 56-41-7, L-Alanine, biological studies 56-85-9, L-Glutamine, biological studies 56-87-1, L-Lysine, biological studies 57-48-7, D-Fructose, biological studies 61-90-5, L-Leucine, biological studies 70-26-8, Ornithine 74-79-3, L-Arginine, biological studies **303-98-0**, **Coenzyme Q10** 328-50-7 **541-15-1**, L-**Carnitine** **1200-22-2**, **.alpha.-Lipoic acid** 6020-87-7, **Creatine** monohydrate 121250-47-3, Conjugated linoleic acid
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(performance-enhancing dietary supplement)

L86 ANSWER 3 OF 17 HCAPLUS COPYRIGHT 2002 ACS
AN 2001:833099 HCAPLUS
DN 135:362605
TI Nutritional preparation comprising ribose and folic acid and medical use thereof
IN Hageman, Robert Johan Joseph; Smeets, Rudolf Leonardus Lodewijk; Verlaan, George
PA N.V. Nutricia, Neth.
SO PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-7004
ICS A61K031-522; A23L001-09; A23L001-302; A61P003-00; A61P003-02; A61P039-06
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 17
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001085178	A1	20011115	WO 2001-NL349	20010508

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 2000-566381 A 20000508
AB Trauma, surgery, inflammation, subfertility, lactation problems, gut disorders, infant nutrition, cancer, arthritis and other joint problems, vascular problems and cardio- or cerebrovascular problems, ischemia, aging, impaired immune function, burns, sepsis, malnutrition, problems with liver or kidneys, malaria, cystic fibrosis, migraine, neurol. problems, respiratory infections, improvement of sports results, muscle soreness, drug intoxication and pain can be treated with a nutritional compn. contg. effective amts. of ribose and folic acid, optionally combined with other components such as niacin, histidine, glutamine, orotate, vitamin B6 and other components.
ST nutrition pharmaceutical ribose folic acid
IT Nervous system
(Huntington's chorea; nutritional prepn. comprising ribose and folic acid and medical use)
IT Digestive tract
Nervous system
(disease; nutritional prepn. comprising ribose and folic acid and medical use)
IT Fertility
Lactation
(disorder; nutritional prepn. comprising ribose and folic acid and medical use)
IT Poisoning, biological
(drug; nutritional prepn. comprising ribose and folic acid and medical use)
IT Respiratory tract
(infection; nutritional prepn. comprising ribose and folic acid and medical use)
IT Nucleotides, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(metab.; nutritional prepn. comprising ribose and folic acid and medical use)
IT Alzheimer's disease
Analgesics

Antiarthritics
Antidepressants
Antitumor agents
Burn
Cardiovascular agents
Cystic fibrosis
Fatigue, biological
Immunity
Kidney, disease
Liver, disease
Malnutrition
Multiple sclerosis
Parkinson's disease
Schizophrenia
Sepsis
Surgery
Tuberculostatics
(nutritional prepn. comprising ribose and folic acid and medical use)

IT Fatty acids, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(nutritional prepn. comprising ribose and folic acid and medical use)

IT **Amino acids**, biological studies
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nutritional prepn. comprising ribose and folic acid and medical use)

IT Muscle
(soreness; nutritional prepn. comprising ribose and folic acid and medical use)

IT Diet
(supplements; nutritional prepn. comprising ribose and folic acid and medical use)

IT Injury
(trauma; nutritional prepn. comprising ribose and folic acid and medical use)

IT 69-93-2, Uric acid, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**antioxidant**; nutritional prepn. comprising ribose and folic acid and medical use)

IT 50-99-7, D-Glucose, biological studies 56-85-9, Glutamine, biological studies 56-87-1, L-Lysine, biological studies **57-00-1**, **Creatine** 59-43-8, Thiamine, biological studies 59-67-6, Niacin, biological studies 61-90-5, L-Leucine, biological studies 63-68-3, L-Methionine, biological studies 63-91-2, L-Phenylalanine, biological studies 65-86-1, Orotic acid 68-19-9, Vitamin b12 71-00-1, L-Histidine, biological studies 72-19-5, L-Threonine, biological studies 73-32-5, L-Isoleucine, biological studies 77-92-9, Citric acid, biological studies 107-35-7, Taurine 107-43-7, Betaine **303-98-0**, **Coenzyme q10 541-15-1**, **Carnitine 1200-22-2**, **.alpha.-Lipoic acid** 7439-95-4, Magnesium, biological studies 7440-66-6, Zinc, biological studies 7782-49-2, Selenium, biological studies 8059-24-3, Vitamin b6 14265-44-2, Phosphate, biological studies 14808-79-8, Sulfate, biological studies
RL: FFD (Food or feed use); MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nutritional prepn. comprising ribose and folic acid and medical use)

IT 50-69-1, D-Ribose 59-30-3, Folic acid, biological studies
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nutritional prepn. comprising ribose and folic acid and medical use)

RE.CNT 5
RE
(1) Bioenergy Inc; WO 9965476 A 1999 HCAPLUS
(2) Depha Team SRL; WO 9215311 A 1992 HCAPLUS
(3) Naito, A; EP 0652012 A 1995 HCAPLUS
(4) Oster, K; DE 2231989 A 1973 HCAPLUS

(5) Oy Jurilab Ltd; WO 0128365 A 2001 HCAPLUS

L86 ANSWER 4 OF 17 HCAPLUS COPYRIGHT 2002 ACS
AN 2001:661244 HCAPLUS
DN 135:200502
TI Composition for the prevention and/or treatment of vascular diseases, comprising propionyl L-**carnitine** and **coenzyme Q10**
IN Cavazza, Claudio
PA Sigma-Tau Healthscience S.p.A., Italy
SO PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-00
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1, **17**
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001064203	A2	20010907	WO 2001-IT81	20010220

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI IT 2000-RM106 A 20000302
AB A compn. is suitable for the prevention and/or treatment of cardiac, central and peripheral cerebral disturbances and for the prevention of learning disorders or disorders related to ageing, as well as for coping with increased energy requirements. This compn.the form of a dietary supplement or a drug, contg. the following as its characterizing active ingredients: (a) propionyl L-**carnitine** or its salts; and (b) **Coenzyme Q10**. Thus, a compn. contained propionyl L-**carnitine** 500, **coenzyme Q10** 25, vitamin E 5, vitamin B1 1, vitamin B2 2, vitamin B6 1, vitamin PP 20, Mg stearate 5, and Zn glycinate 10 mg, folic acid 100, vitamin B12 100, and selenomethionine 50 .mu.g, and vitamin D 500 IU.
ST propionyl **carnitine coenzyme Q10** vascular disease
IT Drug delivery systems
(capsules; propionyl **carnitine** and **coenzyme Q10** compn. for prevention and/or treatment of vascular diseases)
IT Learning
(disorder; propionyl **carnitine** and **coenzyme Q10** compn. for prevention and/or treatment of vascular diseases)
IT Drug delivery systems
(granules; propionyl **carnitine** and **coenzyme Q10** compn. for prevention and/or treatment of vascular diseases)
IT Drug delivery systems
(liqs.; propionyl **carnitine** and **coenzyme Q10** compn. for prevention and/or treatment of vascular diseases)
IT Drug delivery systems
(lozenges; propionyl **carnitine** and **coenzyme Q10** compn. for prevention and/or treatment of vascular diseases)
IT Drug delivery systems
(oral; propionyl **carnitine** and **coenzyme Q10**

compn. for prevention and/or treatment of vascular diseases)
IT Drug delivery systems
(parenterals; propionyl **carnitine** and **coenzyme Q10** compn. for prevention and/or treatment of vascular diseases)
IT Aging, animal
Anti-ischemic agents
Antioxidants
Blood vessel, disease
Brain, disease
Heart, disease
(propionyl **carnitine** and **coenzyme Q10** compn. for prevention and/or treatment of vascular diseases)
IT **Coenzymes**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(propionyl **carnitine** and **coenzyme Q10** compn. for prevention and/or treatment of vascular diseases)
IT Amino acids, biological studies
Minerals, biological studies
Vitamins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(propionyl **carnitine** and **coenzyme Q10** compn. for prevention and/or treatment of vascular diseases)
IT Drug delivery systems
(rectal; propionyl **carnitine** and **coenzyme Q10** compn. for prevention and/or treatment of vascular diseases)
IT Drug delivery systems
(semisolid; propionyl **carnitine** and **coenzyme Q10** compn. for prevention and/or treatment of vascular diseases)
IT Drug delivery systems
(solids; propionyl **carnitine** and **coenzyme Q10** compn. for prevention and/or treatment of vascular diseases)
IT Drug delivery systems
(sublingual; propionyl **carnitine** and **coenzyme Q10** compn. for prevention and/or treatment of vascular diseases)
IT Diet
(supplements; propionyl **carnitine** and **coenzyme Q10** compn. for prevention and/or treatment of vascular diseases)
IT Drug interactions
(synergistic; propionyl **carnitine** and **coenzyme Q10** compn. for prevention and/or treatment of vascular diseases)
IT Drug delivery systems
(syrups; propionyl **carnitine** and **coenzyme Q10** compn. for prevention and/or treatment of vascular diseases)
IT Drug delivery systems
(tablets; propionyl **carnitine** and **coenzyme Q10** compn. for prevention and/or treatment of vascular diseases)
IT Drug delivery systems
(transdermal; propionyl **carnitine** and **coenzyme Q10** compn. for prevention and/or treatment of vascular diseases)
IT **303-98-0**, **Coenzyme Q10** **541-15-1**, L-**Carnitine** **3040-38-8**, Acetyl L-**Carnitine** 20064-19-1, Propionyl L-**carnitine** 25576-40-3, Butyryl L-**Carnitine** 31023-24-2, IsoValeryl L-**Carnitine** 40225-14-7, Valeryl L-**Carnitine**
RL: BAC (Biological activity or effector, except adverse); THU

(Therapeutic use); BIOL (Biological study); USES (Uses)
(propionyl **carnitine** and **coenzyme Q10**
compn. for prevention and/or treatment of vascular diseases)

L86 ANSWER 5 OF 17 HCAPLUS COPYRIGHT 2002 ACS
AN 2001:611750 HCAPLUS
DN 135:166273
TI Dietary supplemental method for **fat** and weight reduction
IN Carthron, James Alexander
PA USA
SO U.S., 4 pp.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K031-555
ICS A61K031-425; A61K031-44; A61K031-35; A61K031-195
NCL 514188000
CC **17-6** (Food and Feed Chemistry)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6277842	B1	20010821	US 2000-690880	20001017

AB A natural method for promoting **fat**, and wt. loss is described while decreasing food cravings comprising administering to an individual in need thereof L-**carnitine**, chromium picolinate, **coenzyme Q10**, **creatine**, **lipoic acid**, niacin, pyruvate, riboflavin, and thiamine. Pyruvate is a major promoter of the oxidn. of dietary fuels like **carbohydrates** and fatty acids in the citric acid cycle. L-**carnitine** allows the transport of fatty acids into the mitochondria where it can be degraded in the citric acid cycle. **Lipoic acid** is a major intracellular **antioxidant**, and component of key enzymes in the citric acid cycle. Niacin, riboflavin, and thiamine are key components of enzymes that lead to the breakdown of dietary fuel mols. such as fatty acids, **amino acids**, and **carbohydrates** that enter the citric acid cycle. The breakdown of these dietary fuels leads to the prodn. of high energy hydrogen atoms. **Coenzyme Q10** accepts these hydrogen atoms and utilizes them for cellular energy prodn. Chromium helps reduce food cravings by normalizing insulin levels. **Creatine** allows increased storage of cellular energy, and promotes lean muscle tissue.
ST dietary supplement **fat** body wt redn
IT Body weight
(dietary supplemental method for **fat** and wt. redn.)
IT **Fats** and **Glyceridic oils**, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(dietary supplemental method for **fat** and wt. redn.)
IT Diet
(supplements; for human **fat** and wt. redn.)
IT **57-00-1**, **Creatine** 59-43-8, Thiamine, biological studies 59-67-6, Niacin, biological studies 83-88-5, Riboflavin, biological studies 127-17-3, Pyruvic acid, biological studies **303-98-0**, **Coenzyme Q10** **541-15-1**, L-**Carnitine** **1200-22-2**, **.alpha.-Lipoic acid** 14639-25-9
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(in dietary supplemental method for **fat** and wt. redn.)
RE.CNT 28
RE
(1) Allen; US 5480657 1996 HCAPLUS
(2) Anderson; The American Journal of Clinical Nutrition 1985, V41, P1177 HCAPLUS
(3) Beale; US 5716926 1998 HCAPLUS
(4) Beale; US 5889040 1999 HCAPLUS
(5) Beale; US 6008252 1999 HCAPLUS
(6) Boyle; Southern Medical Journal 1977, V70(12), P1449 HCAPLUS

(7) Braswell; US 5911992 1999 HCAPLUS
(8) Bruno; Total Health 1998, V20(4), P22
(9) Challem; Vegetarian Times 1998, 247, P58
(10) Conley; Better Nutrition 1999, V61(11), P32
(11) de La Harpe; US 5948772 1999 HCAPLUS
(12) Engel; US 5976550 1999 HCAPLUS
(13) Fine; US 5962030 1999 HCAPLUS
(14) Gardiner; US 5817329 1998 HCAPLUS
(15) Gerth; US 5925377 1999 HCAPLUS
(16) Harpe; US 5905075 1999 HCAPLUS
(17) Harpe; US 5980905 1999 HCAPLUS
(18) Hastings; US 5626849 1997 HCAPLUS
(19) Kaats; Curr Thera Res 1996, V57(10), P747 HCAPLUS
(20) Kaye; US 5340315 1994
(21) Mani; Total Health 1998, V20(1), P36
(22) McCarty; US 5914326 1999
(23) Morgan; Consumer's Guide to Supplements, Prevention 1998, V50(4), P112
(24) Paul; US 5164384 1992 HCAPLUS
(25) Scheer; Better Nutrition 1999, V61(4), P54
(26) Sinatra; Total Health 1997, V19(3), P22
(27) Stanko; Am J Clinical Nutrition 1994, V59, P423 MEDLINE
(28) Womack; US 5730988 1998 HCAPLUS

L86 ANSWER 6 OF 17 HCAPLUS COPYRIGHT 2002 ACS
AN 2001:608885 HCAPLUS
TI Nutrition and the heart
AU Jee Jeebhoy, K. N.; Sole, M. J.
CS Department of Medicine, St. Michael's Hospital, Toronto, ON, Can.
SO Clin. Nutr. (2001), 20(Suppl. 1), 181-186
CODEN: CLNUDP; ISSN: 0261-5614
PB Harcourt Publishers Ltd.
DT Journal
LA English
CC **18** (Animal Nutrition)
AB Protein-energy malnutrition is assocd. with cardiac atrophy and adaptive redn. in cardiac output. Refeeding increases cardiac output and oxygen consumption. Rapid refeeding of severely malnourished patients can ppt. heart failure. Micronutrient deficiencies also contribute to cardiac dysfunction. Cardiac failure can cause wt. loss and malnutrition. The most extreme degrees of cardiac malnutrition occur in patients with right heart failure and tricuspid incompetence. These patients have increased mortality but feeding protein and energy does not improve cardiac function. The hearts in patients with cardiac failure have mitochondrial dysfunction and these mitochondria are depleted of **carnitine**, **coenzyme Q10** and taurine. The severity of depletion is related to the severity of heart failure. In controlled trials, repletion of **carnitine** and **coenzyme Q10** improves outcome. Furthermore, in heart failure oxidative stress is increased and there may be thiamin deficiency. It is proposed that the nutritional therapy of heart failure should be directed to the replacement of **carnitine**, **coenzyme Q10** and taurine as well as **antioxidants** and thiamin rather than protein-energy.
RE.CNT 32
RE
(1) Anker, S; Lancet 1997, V349, P1050 MEDLINE
(2) Azari, J; Can J Neurol Sci 1980, V7, P435 HCAPLUS
(3) Bertilli, A; Drugs Expl Clin Res 1992, V18, P431
(4) Borqvist, M; Eur Heart J 1994, V15, P1641
(5) Carr, J; Am J Cardiol 1989, V63, P709 MEDLINE
(6) DuBourdieu, D; Toxicol Appl Pharmacol 1992, V116, P47 HCAPLUS
(7) Folkers, K; Proc Natl Acad Sci 1985, V82, P901 MEDLINE
(8) Galloway, J; Clin Res 1979, V27, P226A
(9) Gordon, A; Cardiovasc Res 1995, V30, P413 HCAPLUS
(10) Gottdiener, J; Circulation 1978, V58, P425 MEDLINE
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(14) Horn, M; Cardiovasc Res 1999, V43, P117 HCAPLUS
(15) Isgaard, J; Eur Heart J 1998, V19, P1704 HCAPLUS
(16) Keith, M; J Am Coll Card 1998, V31, P1352 MEDLINE
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(18) Mancini, D; Circulation 1992, V85, P1364 HCAPLUS
(19) Masumura, Y; Jpn Circ J 1990, V54, P1471 MEDLINE
(20) Messerli, F; Ann Intern Med 1983, V99, P757 MEDLINE
(21) Mitchell, P; Science 1979, V206, P1148 HCAPLUS
(22) Morisco, C; Clin Invest 1993, V71, PS134 MEDLINE
(23) Nascimben, L; Circulation 1996, V94, P1894 MEDLINE
(24) Neubauer, S; J Clin Invest 1995, V95, P1092 HCAPLUS
(25) Osterziel, K; Lancet 1998, V351, P1233 HCAPLUS
(26) Quigley, A; J Card Failure 2000, V6, P47 HCAPLUS
(27) Regitz, V; Am J Cardiol 1990, V65, P755 MEDLINE
(28) Rizos, I; Am Heart J 2000, V139, PS130
(29) Satoh, H; Gen Pharmacol 1998, V30, P451 HCAPLUS
(30) Sharma, R; Int J Cardiol 1999, V71, P113 MEDLINE
(31) Toth, M; Am J Physiol 1997, V272, PE469 HCAPLUS
(32) Zang, X; J App Physiol 1999, V86, P943

L86 ANSWER 7 OF 17 HCAPLUS COPYRIGHT 2002 ACS
AN 2001:597752 HCAPLUS
DN 135:166304
TI Nutritional supplements for aged pets
IN **Hamilton, Nathan D.**
PA **Juvenon, Inc., USA**
SO PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A23B005-14
CC 17-12 (Food and Feed Chemistry)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001058271	A1	20010816	WO 2001-US2713	20010125
	W: CA, JP				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	US 2001043983	A1	20011122	US 2001-770535	20010125
PRAI	US 2000-178073	P	20000125		
	US 2000-223586	P	20000807		

AB Disclosed herein are compns. to meet the needs of aged pets and other animals. Pet foods, pet treats and pet supplements with anti-aging effects are disclosed whose compns. include the **R-.alpha.-lipoic acid** in the amt. of 0.10 g to 1.5 g and **L-carnitine** in the amt. of 0.10 g to 3 g in addn. to the usual compn. Optionally, **coenzyme Q** can be added in an amt. of at least 1 mg/day. Optionally, **creatine** can be added in an amt. of at least 0.2 g/day. These addnl. components fight age-related declines in mitochondrial function, which result in less energy and other signs of aging.

ST nutrition supplement pet aging
IT **Antioxidants**
(in nutritional supplements for aged pets)
IT **Ubiquinones**
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(in nutritional supplements for aged pets)
IT Aging, animal
Pet animal
(nutritional supplements for aged pets)
IT Diet
(supplements; for aging pets)
IT **541-15-1, L-Carnitine 1200-22-2, .alpha.-Lipoic acid**

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(in nutritional supplements for aged pets)
IT **303-98-0, Coenzyme Q10**
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(in nutritional supplements for aged pets)
RE.CNT 11
RE
(1) Ames; US 5916912 A 1999 HCAPLUS
(2) Bertelli; US 4599232 A 1986 HCAPLUS
(3) Burtle; US 5030657 A 1991 HCAPLUS
(4) Gilbertson & Page; GB 2300103 A 1996 HCAPLUS
(5) Howard; US 5889055 A 1999 HCAPLUS
(6) Keene, B; DE 3904109 A 1989
(7) Kohnke, B; EP 0972451 A 2000 HCAPLUS
(8) Shug; US 4883672 A 1989 HCAPLUS
(9) Shug; US 5240961 A 1993 HCAPLUS
(10) The Iams Company; WO 0000039 A 2000 HCAPLUS
(11) Wolf; US 5989604 A 1999 HCAPLUS

L86 ANSWER 8 OF 17 HCAPLUS COPYRIGHT 2002 ACS
AN 2001:545461 HCAPLUS
DN 135:127168
TI Reduced form of **coenzyme Q** in highly bioavailable stable dosage forms
IN Chopra, Raj K.
PA USA
SO PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K009-48
ICS A61K009-66; A61K009-64; A61K009-20
CC 63-5 (Pharmaceuticals)
Section cross-reference(s): **17**, 62
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001052822	A1	20010726	WO 2001-US1997	20010118

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 2000-488332 A 20000120
US 2000-637559 A 20000811
OS MARPAT 135:127168
AB The present invention relates to a reduced form of **coenzyme Q** also known as ubiquinol in a pharmaceutical or cosmetic dosage form, preferably an oral dosage form such as a gelatin capsule. Compns. according to the present invention show high bioavailability of the reduced form of **Coenzyme Q**. The present invention relates to storage stable compns. comprising effective amts. of ubiquinol in combination with an amt. of a reducing agent effective to maintain ubiquinol in its reduced state when formulated as in, e.g., capsules, tablets and other orally administrable form. A capsule formulation contained vitamin E acetate 6, hydroxylated lecithin 4, phosphatidylcholine 32, medium-chain triglyceride 20, Gelucire 30, **coenzyme Q10** 4, and ascorbyl palmitate 4%.
ST **coenzyme Q** reduced stable dosage form; ubiquinol stable dosage form; cosmetic **coenzyme Q** reduced
IT Brain, disease

(Alper's disease; bioavailable stable dosage forms contg. ubiquinol)
IT Muscle, disease
(Kearns-Sayre syndrome; bioavailable stable dosage forms contg. ubiquinol)
IT Brain, disease
(MELAS (mitochondrial myopathy, encephalopathy, lactic acidosis, and stroke-like episodes); bioavailable stable dosage forms contg. ubiquinol)
IT Algae
Anticholesteremic agents
Antihypertensives
Blood pressure
Dentifrices
Hypercholesterolemia
Hypoxia, animal
Immune system
Mouthwashes
Solubilizers
Surfactants
(bioavailable stable dosage forms contg. ubiquinol)
IT Castor oil
Coconut oil
Cottonseed oil
Flavonoids
Linseed oil
Palm oil
Proanthocyanidins
Rape oil
Safflower oil
Soybean oil
Sunflower oil
Tocopherols
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(bioavailable stable dosage forms contg. ubiquinol)
IT Rice (Oryza sativa)
(bran; bioavailable stable dosage forms contg. ubiquinol)
IT Drug delivery systems
(capsules, soft; bioavailable stable dosage forms contg. ubiquinol)
IT Drug delivery systems
(capsules; bioavailable stable dosage forms contg. ubiquinol)
IT Drug delivery systems
(chewing gums; bioavailable stable dosage forms contg. ubiquinol)
IT Cosmetics
(creams; bioavailable stable dosage forms contg. ubiquinol)
IT Nervous system
(degeneration; bioavailable stable dosage forms contg. ubiquinol)
IT Ketones, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(diketones, unsatd., curcuminoids; bioavailable stable dosage forms contg. ubiquinol)
IT Periodontium
(disease; bioavailable stable dosage forms contg. ubiquinol)
IT Bilberry
(ext.; bioavailable stable dosage forms contg. ubiquinol)
IT Silybum marianum
(exts.; bioavailable stable dosage forms contg. ubiquinol)
IT Heart, disease
(failure; bioavailable stable dosage forms contg. ubiquinol)
IT Fats and Glyceridic oils, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fish; bioavailable stable dosage forms contg. ubiquinol)
IT Eye, disease
(hereditary optic atrophy; bioavailable stable dosage forms contg. ubiquinol)
IT Acidosis
(lactic; bioavailable stable dosage forms contg. ubiquinol)

IT Drug delivery systems
(lotions; bioavailable stable dosage forms contg. ubiquinol)
IT Drug delivery systems
(lozenges; bioavailable stable dosage forms contg. ubiquinol)
IT Glycerides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(medium-chain; bioavailable stable dosage forms contg. ubiquinol)
IT Brain, disease
(mitochondrial encephalopathy; bioavailable stable dosage forms contg. ubiquinol)
IT Drug delivery systems
(ointments, creams; bioavailable stable dosage forms contg. ubiquinol)
IT Drug delivery systems
(oral; bioavailable stable dosage forms contg. ubiquinol)
IT Drug delivery systems
(parenterals; bioavailable stable dosage forms contg. ubiquinol)
IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polyunsatd., n-3; bioavailable stable dosage forms contg. ubiquinol)
IT **Ubiquinones**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(reduced; bioavailable stable dosage forms contg. ubiquinol)
IT Bran
(rice; bioavailable stable dosage forms contg. ubiquinol)
IT Brain, disease
(stroke; bioavailable stable dosage forms contg. ubiquinol)
IT Drug delivery systems
(suppositories; bioavailable stable dosage forms contg. ubiquinol)
IT Drug delivery systems
(tablets; bioavailable stable dosage forms contg. ubiquinol)
IT Drug delivery systems
(topical; bioavailable stable dosage forms contg. ubiquinol)
IT Fats and Glyceridic oils, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vegetable; bioavailable stable dosage forms contg. ubiquinol)
IT 50-81-7, Vitamin C, biological studies 50-81-7D, Vitamin C, esters 52-90-4, L-Cysteine, biological studies 53-57-6, NADPH 56-81-5, Glycerin, biological studies 57-55-6, Propylene glycol, biological studies 58-68-4, NADH 58-95-7, Vitamin E acetate 59-02-9, D-.alpha.-Tocopherol 59-02-9D, .alpha.-Tocopherol, esters 64-17-5, Ethanol, biological studies 68-26-8, Retinol 68-26-8D, Vitamin A, esters 70-18-8, Reduced glutathione, biological studies 83-88-5, Riboflavin, biological studies 98-92-0, Niacinamide 116-31-4, Retinal 127-40-2, Lutein 127-47-9, Retinol acetate 137-66-6, Ascorbyl palmitate 144-68-3, Zeaxanthin 151-21-3, Sodium lauryl sulfate, biological studies 302-79-4, Retinoic acid 302-79-4D, Retinoic acid, esters **303-98-0**, **Coenzyme Q10** 432-70-2, .alpha.-Carotene 472-61-7, Astaxanthin 501-36-0, Resveratrol 502-65-8, Lycopene **541-15-1**, L-**Carnitine** 616-91-1, N-Acetylcysteine 992-78-9, Reduced **Coenzyme Q10** **1200-22-2D**, **.alpha.-Lipoic acid**, reduced 1338-43-8, Span 80 1406-18-4, Vitamin E 1406-18-4D, Vitamin E, esters **3040-38-8**, Acetyl L-**carnitine** 6829-55-6D, Tocotrienol, derivs. 7235-40-7, .beta.-Carotene 7439-95-4, Magnesium, biological studies 7439-96-5, Manganese, biological studies 7440-66-6, Zinc, biological studies 7782-49-2, Selenium, biological studies 9005-65-6, Tween 80 20064-19-1, Propionyl L-**carnitine** 73573-88-3, Mevastatin 75330-75-5, Lovastatin 79902-63-9, Simvastatin 81093-37-0, Pravastatin 93957-54-1, Fluvastatin 93957-55-2, Fluindostatin 220349-64-4, L-**Carnitine** fumarate, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(bioavailable stable dosage forms contg. ubiquinol)
IT 9028-35-7, HMG-CoA reductase
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibitors; bioavailable stable dosage forms contg. ubiquinol)

RE.CNT 2
RE
(1) Borowy-Borowski; US 6045826 A 2000 HCAPLUS
(2) Pozzi; US 4869900 A 1989 HCAPLUS

L86 ANSWER 9 OF 17 HCAPLUS COPYRIGHT 2002 ACS
AN 2001:338345 HCAPLUS
DN 134:336228
TI Method using **carnitine** and an **antioxidant** for treating benign forgetfulness
IN **Hamilton, Nathan**
PA **Juvenon, Inc., USA**
SO PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-205
CC 1-11 (Pharmacology)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001032168	A1	20010510	WO 2000-US30571	20001102
W: CA, JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
US 6335361	B1	20020101	US 2000-706207	20001102
PRAI US 1999-163352	P	19991103		
US 2000-223167	P	20000807		

AB Methods are disclosed to treat cognition disorders, particularly those assocd. with aging. The method comprises administering a combination of a **carnitine** and an **antioxidant**. Preferably the **antioxidant** is **thioctic acid**. Preferably 0.12-3 g of **carnitine** (particularly acetyl-L-**carnitine**) and 0.12-1.5 g of R-.**alpha**.-**lipoic acid** are administered. Optionally, **coenzyme Q** and/or **creatine** also are administered. Preferably 10-500 mg/day of **coenzyme Q10** and 1-30 g/day of **creatine** are administered. The same method can be used to treat cognition deficits assocd. with carbon monoxide poisoning, mild traumatic brain injury, Type 2 diabetes mellitus, obsessive-compulsive disorder, environmental toxin exposure, and other conditions.
ST forgetfulness cognition disorder **antioxidant carnitine**; **lipoic acid carnitine** forgetfulness cognition disorder; **thioctic acid carnitine** forgetfulness cognition disorder; **acetylcarnitine antioxidant** forgetfulness cognition disorder; **coenzyme Q antioxidant** forgetfulness cognition disorder; **creatine antioxidant** forgetfulness cognition disorder
IT Aging, animal
Cognition enhancers
(**carnitine** and **antioxidant** for treating cognition disorders)
IT **Ubiquinones**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**carnitine** and **antioxidant** for treating cognition disorders)
IT Environmental pollution
(environmental toxin exposure; **carnitine** and **antioxidant** for treating cognition disorders)
IT Brain, disease
(injury, mild traumatic brain injury; **carnitine** and **antioxidant** for treating cognition disorders)
IT Diabetes mellitus
(non-insulin-dependent; **carnitine** and **antioxidant** for treating cognition disorders)

IT Mental disorder
(obsession-compulsion; **carnitine** and **antioxidant** for treating cognition disorders)
IT **Antioxidants**
(pharmaceutical; **carnitine** and **antioxidant** for treating cognition disorders)
IT **57-00-1, Creatine 303-98-0, Coenzyme Q10 541-15-1, Carnitine 1200-22-2, (R)-.alpha.-Lipoic acid**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**carnitine** and **antioxidant** for treating cognition disorders)
IT 630-08-0, Carbon monoxide, biological studies
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(poisoning; **carnitine** and **antioxidant** for treating cognition disorders)
RE.CNT 2
RE
(1) Cavazza; US 4346107 A 1982 HCAPLUS
(2) Wiegand; US 3810994 A 1974 HCAPLUS

L86 ANSWER 10 OF 17 HCAPLUS COPYRIGHT 2002 ACS
AN 2001:228740 HCAPLUS
DN 134:251564
TI Nutritional supplement for increased energy and stamina
IN **Hamilton, Nathan**
PA **Juvenon Corporation, USA**
SO PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K047-00
CC 17-7 (Food and Feed Chemistry)
Section cross-reference(s): 18
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001021208	A1	20010329	WO 2000-US24803	20000908
	W: AU, CA, JP				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRAI	US 1999-156028	P	19990923		
	US 2000-223465	P	20000807		

AB Disclosed are nutritional supplements for humans and pets. Nutritional beverages, instant powders, puddings and bars include R-.**alpha**.-**lipoic acid**, at 0.12-1.5 g and L-**carnitine**, at 0.12-3 g, in addn. to the usual components. Optionally, **coenzyme Q** and/or **creatine** also are added. These addnl. components fight age-related declines in mitochondrial function which result in less energy and other signs of aging.
ST nutritional supplement antiaging human pet
IT Aging, animal
(anti-aging nutritional supplement for increased energy and stamina)
IT Pet animal
(nutritional supplement for increased energy and stamina)
IT **Ubiquinones**
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(nutritional supplement for increased energy and stamina contg.)
IT Diet
(supplements; nutritional supplement for increased energy and stamina)
IT **57-00-1, Creatine 541-15-1, L-Carnitine 1200-22-2, R-.alpha.-Lipoic acid**
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(nutritional supplement for increased energy and stamina contg.)

RE.CNT 2
RE
(1) Maxwell; US 6063432 A 2000 HCAPLUS
(2) Rollins; US 6110511 A 2000 HCAPLUS

L86 ANSWER 11 OF 17 HCAPLUS COPYRIGHT 2002 ACS
AN 2001:13549 HCAPLUS
DN 134:221809
TI Conditioned nutritional requirements and the pathogenesis and treatment of myocardial failure
AU Sole, Michael J.; Jeejeebhoy, Khursheed N.
CS Divisions of Cardiology and Gastroenterology, Department of Medicine, University of Toronto, Toronto, ON, Can.
SO Curr. Opin. Clin. Nutr. Metab. Care (2000), 3(6), 417-424
CODEN: COCMF3; ISSN: 1363-1950
PB Lippincott Williams & Wilkins
DT Journal; General Review
LA English
CC **18-0** (Animal Nutrition)
AB A commentary and review with 77 refs. The majority of symptomatic patients with congestive heart failure have been shown to be significantly malnourished. Myocardial and skeletal muscle energy reserves are also diminished. Total daily energy expenditure in these patients is less than that in control individuals, and high **protein**-calorie feeds do not reverse the abnormalities; thus, the wasting that occurs in patients with congestive heart failure is metabolic rather than because of neg. **protein**-calorie balance. Several specific deficiencies have been found in the failing myocardium: a redn. in the content of L-**carnitine, coenzyme Q10, creatine** and thiamine, nutrient cofactors that are important for myocardial energy prodn.; a relative deficiency of taurine, an **amino acid** that is integral to the modulation of intracellular calcium levels; and an increase in myocardial oxidative stress, and a redn. of both endogenous and exogenous **antioxidant** defences. In addn., these processes may influence skeletal muscle metab. and function. Cellular nutritional requirements conditioned by metabolic abnormalities in heart failure are important considerations in the pathogenesis of the skeletal and cardiac muscle dysfunction. A comprehensive restoration of adequate myocyte nutrition would seem to be essential to any therapeutic strategy designed to benefit patients suffering from this disease.
ST review nutrition heart failure
IT Heart, disease
(attack; conditioned nutritional requirements and the pathogenesis and treatment of myocardial failure)
IT Energy metabolism, animal
Heart
Nutrition, animal
Oxidative stress, biological
(conditioned nutritional requirements and the pathogenesis and treatment of myocardial failure)
IT Heart, disease
(failure; conditioned nutritional requirements and the pathogenesis and treatment of myocardial failure)
IT Malnutrition
(**protein**-energy; conditioned nutritional requirements and the pathogenesis and treatment of myocardial failure)
IT **57-00-1, Creatine** 59-43-8, Thiamine, biological studies 107-35-7, Taurine **303-98-0, Coenzyme q10 541-15-1, Carnitine**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BIOL (Biological study); PROC (Process)
(conditioned nutritional requirements and the pathogenesis and treatment of myocardial failure)
RE.CNT 77
RE
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L86 ANSWER 12 OF 17 HCAPLUS COPYRIGHT 2002 ACS
AN 2000:351364 HCAPLUS
DN 132:352828
TI **Antioxidant** composition comprising propionyl L-**carnitine** and a flavonoid against thrombosis and atherosclerosis
IN Cavazza, Claudio
PA Sigma-Tau Healthscience S.p.A., Italy
SO PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-22
ICS A61K031-205; A61K035-78; A23L001-302; A23L001-30; A23L001-304
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1, **18**
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000028986	A1	20000525	WO 1999-IT351	19991105
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	IT 1302863	B1	20001010	IT 1998-RM706	19981113
	EP 1128822	A1	20010905	EP 1999-956311	19991105
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	NO 2001002338	A	20010511	NO 2001-2338	20010511
PRAI	IT 1998-RM706	A	19981113		
	WO 1999-IT351	W	19991105		

AB A compn. is disclosed which comprises as characterizing active ingredients propionyl L-**carnitine** and a flavonoid, typically quercetin or its 3-rutinoside, rutin, for the prevention and/or therapeutic treatment of various alterations and pathol. states induced by free radicals and by thrombotic or atherosclerotic abnormalities, that may take the form of a dietary supplement, dietetic support or of an actual medicine. For example, a dietary supplement or medicament in unit dosage forms comprises propionyl L-**carnitine** 125, quercetin 125, citroflavonoids 150, vitamin C 100, rutin 20, CoQ10 10, vitamin E 5, .beta.-carotene 5, Mn glycinate 5, Zn glycinate 5, Mg glycinate 20 mg, and selenium methionine 50 .mu.g.
ST **antioxidant propionylcarnitine** flavonoid dietary supplement; thrombosis atherosclerosis prevention **carnitine** flavonoid
IT Antiarteriosclerotics
(antiatherosclerotics; **antioxidant** compn. contg. L-**carnitine** deriv. and flavonoids against thrombosis and atherosclerosis)
IT Anticoagulants

Antioxidants
Platelet aggregation inhibitors
Radical scavengers
(**antioxidant** compn. contg. L-**carnitine** deriv. and flavonoids against thrombosis and atherosclerosis)

IT **Coenzymes**
Flavonoids
Minerals, biological studies
Vitamins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**antioxidant** compn. contg. L-**carnitine** deriv. and flavonoids against thrombosis and atherosclerosis)

IT Drug delivery systems
(capsules; **antioxidant** compn. contg. L-**carnitine** deriv. and flavonoids against thrombosis and atherosclerosis)

IT Drug delivery systems
(granules; **antioxidant** compn. contg. L-**carnitine** deriv. and flavonoids against thrombosis and atherosclerosis)

IT Drug delivery systems
(lozenges; **antioxidant** compn. contg. L-**carnitine** deriv. and flavonoids against thrombosis and atherosclerosis)

IT Drug delivery systems
(ophthalmic; **antioxidant** compn. contg. L-**carnitine** deriv. and flavonoids against thrombosis and atherosclerosis)

IT Drug delivery systems
(oral; **antioxidant** compn. contg. L-**carnitine** deriv. and flavonoids against thrombosis and atherosclerosis)

IT Drug delivery systems
(parenterals; **antioxidant** compn. contg. L-**carnitine** deriv. and flavonoids against thrombosis and atherosclerosis)

IT Drug delivery systems
(rectal; **antioxidant** compn. contg. L-**carnitine** deriv. and flavonoids against thrombosis and atherosclerosis)

IT Diet
(supplement for; **antioxidant** compn. contg. L-**carnitine** deriv. and flavonoids against thrombosis and atherosclerosis)

IT Drug delivery systems
(syrups; **antioxidant** compn. contg. L-**carnitine** deriv. and flavonoids against thrombosis and atherosclerosis)

IT Drug delivery systems
(tablets; **antioxidant** compn. contg. L-**carnitine** deriv. and flavonoids against thrombosis and atherosclerosis)

IT Drug delivery systems
(transdermal; **antioxidant** compn. contg. L-**carnitine** deriv. and flavonoids against thrombosis and atherosclerosis)

IT 50-81-7, Vitamin C, biological studies 117-39-5, Quercetin 153-18-4, Rutin **303-98-0**, CoQ10 529-44-2, Myricetin **541-15-1**, L-**Carnitine** 1406-18-4, Vitamin E 1464-42-2, Selenium methionine **3040-38-8**, Acetyl L-**carnitine** 7235-40-7, .beta.-Carotene 14281-77-7 14281-83-5, Zinc glycinate 14783-68-7 17912-87-7, Myricitrin 20064-19-1, PropionylL-**carnitine** 31023-24-2, Isovaleryl L-**carnitine** 40225-14-7, Valeryl L-**carnitine**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**antioxidant** compn. contg. L-**carnitine** deriv. and flavonoids against thrombosis and atherosclerosis)

RE.CNT 10
RE
(1) Anon; URL:http://www.1nutrition.com/products/Labrada/kwik_burn.htm 2000
(2) Anon; URL:http://www.healthness.com/metacuts.htm 2000
(3) Beiersdorf AG; DE 19806890 A 1999 HCAPLUS
(4) Bork Roelof Andre; WO 9958000 A 1999 HCAPLUS
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(10) Schlachter Herbert; WO 9704668 A 1997 HCAPLUS

L86 ANSWER 13 OF 17 HCAPLUS COPYRIGHT 2002 ACS
AN 2000:161085 HCAPLUS
DN 132:179851
TI **Antioxidant** composition comprising acetyl L-**carnitine** and .**alpha.**-**lipoic acid**
IN Cavazza, Claudio
PA Sigma-Tau Healthscience S.P.A., Italy
SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A23L001-30
ICS A23L001-302; A61K031-585; A61K031-385; A61K031-205
CC **17-6** (Food and Feed Chemistry)
Section cross-reference(s): 63
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000011968	A1	20000309	WO 1999-IT268	19990819
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	IT 1302307	B1	20000905	IT 1998-RM566	19980901
	AU 9953871	A1	20000321	AU 1999-53871	19990819
	BR 9913288	A	20010522	BR 1999-13288	19990819
	EP 1112005	A1	20010704	EP 1999-939612	19990819
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	NO 2001000954	A	20010425	NO 2001-954	20010226
PRAI	IT 1998-RM566	A	19980901		
	WO 1999-IT268	W	19990819		

AB A compn. is disclosed which comprises as characterizing active ingredients acetyl L-**carnitine** and .**alpha.**-**lipoic acid**, for the prevention and/or therapeutic treatment of various alterations and pathol. states induced by free radicals, that may take the form of a dietary supplement, dietetic support or of an actual medicine.
ST **acetylcarnitine** lipoate **antioxidant** diet radical damage
IT **Antioxidants**
Capsules
Diabetes mellitus
Drops
Drugs
Environmental pollution
Food additives
Syrups (sweetening agents)
Tablets
Vials
(**antioxidant** compn. comprising acetyl L-**carnitine** and .**alpha.**-**lipoic acid**)
IT **Coenzymes**
Mineral elements, biological studies
Vitamins
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**antioxidant** compn. comprising acetyl L-**carnitine**

and .alpha.-lipoic acid)
IT Drug delivery systems
(capsules; antioxidant compn. comprising acetyl L-carnitine and .alpha.-lipoic acid
)
IT Food
(dietetic; antioxidant compn. comprising acetyl L-carnitine and .alpha.-lipoic acid
)
IT Metabolism, animal
(disorder, in glucose metab.; antioxidant compn. comprising acetyl L-carnitine and .alpha.-lipoic acid)
IT Drug delivery systems
(granules; antioxidant compn. comprising acetyl L-carnitine and .alpha.-lipoic acid
)
IT Reperfusion
(injury; antioxidant compn. comprising acetyl L-carnitine and .alpha.-lipoic acid
)
IT Brain, disease
Heart, disease
(ischemia; antioxidant compn. comprising acetyl L-carnitine and .alpha.-lipoic acid
)
IT Drug delivery systems
(lozenges; antioxidant compn. comprising acetyl L-carnitine and .alpha.-lipoic acid
)
IT Nerve, disease
(neuropathy, toxic; antioxidant compn. comprising acetyl L-carnitine and .alpha.-lipoic acid
)
IT Drug delivery systems
(parenterals; antioxidant compn. comprising acetyl L-carnitine and .alpha.-lipoic acid
)
IT Drug delivery systems
(rectal; antioxidant compn. comprising acetyl L-carnitine and .alpha.-lipoic acid
)
IT Drug delivery systems
(syrups; antioxidant compn. comprising acetyl L-carnitine and .alpha.-lipoic acid
)
IT Drug delivery systems
(tablets; antioxidant compn. comprising acetyl L-carnitine and .alpha.-lipoic acid
)
IT Drug delivery systems
(transdermal; antioxidant compn. comprising acetyl L-carnitine and .alpha.-lipoic acid
)
IT 50-81-7, Vitamin C, biological studies 107-35-7, Taurine **303-98-0**, CoQ10 **541-15-1**, L-Carnitine **541-15-1D**, L-Carnitine, salts 557-04-0, Magnesium stearate **1200-22-2**, Lipoic acid 1406-18-4, Vitamin E 1464-42-2, Selenomethionine **3040-38-8**, Acetyl L-carnitine 7235-40-7, .beta.-Carotene 14281-83-5, Zinc glycinate 20064-19-1, Propionyl L-carnitine 31023-24-2, Isovaleryl L-carnitine 40225-14-7, Valeryl L-carnitine
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antioxidant compn. comprising acetyl L-carnitine and .alpha.-lipoic acid)

IT 50-99-7, D-Glucose, biological studies
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(metabolic disorders; **antioxidant** compn. comprising acetyl L-**carnitine** and .**alpha**.-**lipoic acid**
)
RE.CNT 8
RE
(1) Ames, B; US 5916912 A 1999 HCAPLUS
(2) Ames, B; TOXICOLOGY LETTERS 1998, V102, P5
(3) Crandall, W; WO 9702041 A 1997 HCAPLUS
(4) Kosbab, J; WO 9833494 A 1998 HCAPLUS
(5) Seidman, M; US 5977162 A 1999 HCAPLUS
(6) Shapiro, H; WO 9501096 A 1995 HCAPLUS
(7) Sigma Tau Ind Farmaceuti; EP 0797993 A 1997 HCAPLUS
(8) Sigma Tau Ind Farmaceuti; WO 9841113 A 1998 HCAPLUS

L86 ANSWER 14 OF 17 HCAPLUS COPYRIGHT 2002 ACS
AN 2000:33527 HCAPLUS
DN 132:83671
TI Creatine-containing formulations
IN Seyerl, Joachim
PA SKW Trostberg A.-G., Germany
SO Ger. Offen., 6 pp.
CODEN: GWXXBX
DT Patent
LA German
IC ICM A61K031-195
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): **17**
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 19830768	A1	20000113	DE 1998-19830768	19980709

AB Pharmaceutical formulations for treatment of muscular dystrophy and other myopathies, as well as nutritional supplements, are provided which contain creatine or a salt thereof 0.1-10 g, .gtoreq.1 neurotransmitter or precursor thereof 2 mg-8 g, .**alpha**.-**lipoic acid** 0.3-3 g, and optionally L-**carnitine** or a salt thereof 0.8-1 g and/or **coenzyme Q10** 50-150 mg (all amts. refer to daily doses). Creatine contributes to muscle energy metab. through its conversion to phosphocreatine. Neurotransmitters and assocd. compds. such as choline and taurine improve nerve and muscle function; hypericin, an MAO inhibitor, functions as an antidepressant. . **alpha**.-**Lipoic acid** and L-**carnitine** act as hypolipemic agents. The formulations synergistically improve muscle strength and efficiency in patients with muscular dystrophy or atrophy without side effects. Thus, a medicinal tea contained creatine pyruvate 5000, **carnitine** 500, taurine 500, choline 500, . **alpha**.-**lipoic acid** 500, St. John's wort ext. (contg. 0.3 wt.% hypericin) 300, and sucrose 200 mg.
ST muscular dystrophy creatine neurotransmitter lipoate; atrophy muscular **carnitine coenzyme Q10**; choline muscular dystrophy
IT Muscle, disease
Muscular dystrophy
St.-John's-wort (Hypericum perforatum)
(creatine-contg. formulations)
IT Neurotransmitters
RL: BAC (Biological activity or effector, except adverse); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(creatine-contg. formulations)
IT Drug interactions
(synergistic; creatine-contg. formulations)
IT **57-00-1**, Creatine 60-18-4, L-Tyrosine, biological studies 62-49-7 107-35-7, Taurine **303-98-0**, **Coenzyme Q10** **541-15-1**, L-**Carnitine** 548-04-9,

Hypericin **1200-22-2**, .**alpha**.-**Lipoic acid** 4350-09-8 6645-46-1, L-**Carnitine** hydrochloride 36687-82-8, L-**Carnitine** tartrate 208535-04-0 220349-64-4, L-**Carnitine** fumarate, biological studies 253786-77-5, biological studies
RL: BAC (Biological activity or effector, except adverse); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(creatine-contg. formulations)

L86 ANSWER 15 OF 17 HCAPLUS COPYRIGHT 2002 ACS
AN 1999:705000 HCAPLUS
DN 131:314225
TI Mitochondrial function-enhancing nutritional supplement for improvement of auditory function
IN Seidman, Michael D.
PA USA
SO U.S., 7 pp.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K031-385
ICS A61K031-205
NCL 514440000
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): **17**
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5977162	A	19991102	US 1997-931134	19970916
PRAI US 1996-26162		19960916		

AB A nutritional supplement for enhancing mitochondrial function in cells includes 10-1000 mg of **alpha-lipoic acid**, 10-1000 mg acetyl-L-**carnitine**, 15-360 mg **coenzyme Q**-10, and 15-360 mg glutathione. The compn. may further comprise a carrier for these components such as a liq. or tablet for oral ingestion on a daily basis.
ST hearing nutritional supplement
IT Nutrition, animal
(dietary supplements for; mitochondrial function-enhancing nutritional supplement for improvement of auditory function)
IT Drug delivery systems
(liqs.; mitochondrial function-enhancing nutritional supplement for improvement of auditory function)
IT Hearing
Mitochondria
(mitochondrial function-enhancing nutritional supplement for improvement of auditory function)
IT Drug delivery systems
(tablets; mitochondrial function-enhancing nutritional supplement for improvement of auditory function)
IT 70-18-8, Glutathione, biological studies **303-98-0**, **Coenzyme q10 1200-22-2**, .**alpha**.-**Lipoic acid 3040-38-8**, Acetyl L-**carnitine** 7491-74-9, Piracetam
RL: BAC (Biological activity or effector, except adverse); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(mitochondrial function-enhancing nutritional supplement for improvement of auditory function)
RE.CNT 78
RE
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L86 ANSWER 16 OF 17 HCAPLUS COPYRIGHT 2002 ACS
AN 1998:682101 HCAPLUS
DN 129:302076
TI Nutritional composition for improvements in cell energetics
IN Sole, Michael J.; Jeejeebhoy, Khursheed N.
PA Can.
SO PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-00
CC **18-2** (Animal Nutrition)
Section cross-reference(s): 13, 14, 63
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9843617	A2	19981008	WO 1998-CA286	19980325
	WO 9843617	A3	19981217		
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 6080788	A	20000627	US 1998-2765	19980106
	AU 9867153	A1	19981022	AU 1998-67153	19980325
	AU 739353	B2	20011011		
	EP 969744	A2	20000112	EP 1998-912176	19980325
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	BR 9808088	A	20000308	BR 1998-8088	19980325
PRAI	US 1997-826234	A	19970327		

US 1998-2765 A 19980106
WO 1998-CA286 W 19980325

AB This invention provides a dietary supplement comprising L-**Carnitine** (or its functional analogs such as Acetyl-**Carnitine** or Propionyl-L-**Carnitine**), **Coenzyme Q10** and Taurine useful in the correction of the abnormality in mitochondrial energetics seen in cardiac failure and certain other diseases. In one preferred embodiment of the invention, a high **protein**, high calorie nutritional feeding supplement comprising the three aforementioned nutrients together with one or more of Cysteine, **Creatine**, Vitamin E (RRR-d-alpha-tocopherol), Vitamin C (ascorbic acid), Selenium, and Thiamin is provided.

ST mitochondria energy metab heart disease diet; heart disease diet therapy **carnitine** deriv; **antioxidant carnitine** heart disease diet therapy

IT AIDS (disease)
Antitumor agents
Cachexia
Cardiovascular diseases
Chemotherapy
Chronic fatigue syndrome
Dairy products
Exercise
Heart diseases
Heart failure
Immunological diseases
Immunosuppressants
Kidney diseases
Nerve degeneration
Oxidative stress (biological)
Sepsis
Soybean products
Stroke
Tumors (animal)
(**carnitine**-contg. nutritional compn. for improvements in cell energetics, esp. for cardiac failure treatment)

IT Diseases (animal)
(chronic multisystem; **carnitine**-contg. nutritional compn. for improvements in cell energetics, esp. for cardiac failure treatment)

IT Aging (animal)
(disorders; **carnitine**-contg. nutritional compn. for improvements in cell energetics, esp. for cardiac failure treatment)

IT Neuromuscular transmission
(enhancers; **carnitine**-contg. nutritional compn. for improvements in cell energetics, esp. for cardiac failure treatment)

IT Food
(health bars; **carnitine**-contg. nutritional compn. for improvements in cell energetics, esp. for cardiac failure treatment)

IT Lung diseases
(obstructive; **carnitine**-contg. nutritional compn. for improvements in cell energetics, esp. for cardiac failure treatment)

IT Muscle diseases
(respiratory fatigue; **carnitine**-contg. nutritional compn. for improvements in cell energetics, esp. for cardiac failure treatment)

IT Diseases (animal)
(wasting; **carnitine**-contg. nutritional compn. for improvements in cell energetics, esp. for cardiac failure treatment)

IT 50-81-7, Vitamin C, biological studies 52-90-4, L-Cysteine, biological studies **57-00-1, Creatine** 59-02-9, d-.alpha.-Tocopherol 59-43-8, Thiamin, biological studies 107-35-7, Taurine **303-98-0, Coenzyme Q10** **541-15-1, L-Carnitine** **3040-38-8**, Acetyl-**Carnitine** 7782-49-2, Selenium, biological studies 20064-19-1, Propionyl-L-**Carnitine**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(**carnitine**-contg. nutritional compn. for improvements in cell energetics, esp. for cardiac failure treatment)

L86 ANSWER 17 OF 17 HCAPLUS COPYRIGHT 2002 ACS
AN 1981:173200 HCAPLUS
DN 94:173200
TI Toward a "bio-energy supplement" - a prototype for functional orthomolecular supplementation
AU McCarty, Mark F.
CS San Diego, CA, 92116, USA
SO Med. Hypotheses (1981), 7(4), 515-38
CODEN: MEHYDY; ISSN: 0306-9877
DT Journal; General Review
LA English
CC **18-0** (Animal Nutrition)
AB A review with 132 refs. A broad-spectrum approach to the nutritional optimization of bioenergetics is discussed as a specific example of the principle of functional orthomol. supplementation. Exptl. and clin. studies with metavitamins, such as **lipoic acid**, **carnitine**, **coenzyme Q**, and creatine, and mitochondrial **antioxidants** indicate that many nutritional agents involved in bioenergetics are often functionally subsatd.
ST review diet supplement
IT Animal nutrition
Diet
(supplements for improvement of)

=> fil wpix
FILE 'WPIX' ENTERED AT 08:10:27 ON 08 JAN 2002
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FILE LAST UPDATED: 05 JAN 2002 <20020105/UP>
MOST RECENT DERWENT UPDATE 200201 <200201/DW>
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=> d all abeq tech tot l122

L122 ANSWER 1 OF 7 WPIX COPYRIGHT 2002 DERWENT INFORMATION LTD
AN 2001-496948 [54] WPIX
DNC C2001-149295
TI Pet food, treat, and supplement for dogs, cats, horses, fish, birds, and other animals, includes **antioxidant** and **carnitine**.
DC D13
IN HAMILTON, N D
PA (HAMI-I) HAMILTON N D; (JUVE-N) JUVENON INC
CYC 22
PI WO 2001058271 A1 20010816 (200154)* EN 19p A23B005-14
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
W: CA JP
US 2001043983 A1 20011122 (200176) A23K001-165 <--
ADT WO 2001058271 A1 WO 2001-US2713 20010125; US 2001043983 A1 Provisional US 2000-178073P 20000125, Provisional US 2000-223586P 20000807, US 2001-770535 20010125

PRAI US 2000-223586P 20000807; US 2000-178073P 20000125; US 2001-770535 20010125
IC ICM A23B005-14; **A23K001-165**
AB WO 200158271 A UPAB: 20010924
NOVELTY - Pet food, treat, and supplement comprises **antioxidant** and **carnitine**. The pet food also comprises **carbohydrate**, **protein**, **fat**, and **fiber**. The pet treat also includes energy source(s) and flavors.
USE - For dogs, cats, horses, fish, birds, and other animals.
ADVANTAGE - The invention has anti-aging properties and increases energy and stamina with fewer calories.
Dwg.0/0
FS CPI
FA AB
MC CPI: **D03-G01**
TECH UPTX: 20010924
TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Component: The **carnitine** is acetyl-**carnitine** (0.1-3 g). The **antioxidant** is R-alpha-lipoic acid (0.1-1.5 g). Optionally a **coenzyme Q10** at a dose of at least 1 mg/day and **creatine** at a dose of at least 0.2 (g/d) are added.

L122 ANSWER 2 OF 7 WPIX COPYRIGHT 2002 DERWENT INFORMATION LTD
AN 2001-335777 [35] WPIX
DNC C2001-103704
TI Method for treating cognition disorders, particularly related to aging, by administering an **antioxidant**, a **carnitine** and optionally **coenzyme Q** and/or **creatine**.
DC B05
IN HAMILTON, N
PA (JUVE-N) JUVENON INC
CYC 21
PI WO 2001032168 A1 20010510 (200135)* EN 23p A61K031-205
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
W: CA JP
ADT WO 2001032168 A1 WO 2000-US30571 20001102
PRAI US 2000-223167P 20000807; US 1999-163352P 19991103
IC ICM A61K031-205
AB WO 200132168 A UPAB: 20010625
NOVELTY - The use of a combination of the micronutrients **carnitine** and an **antioxidant**, and optionally **coenzyme Q** and/or **creatine**, for treating cognition disorders is new.
ACTIVITY - Neuroprotective; **antioxidant**; antidiabetic; tranquilizer; antidote; respiratory.
No details for tests of neuroprotective activity are given.
MECHANISM OF ACTION - Restore mitochondrial function.
USE - For treating memory deficits associated with aging, type 2 diabetes mellitus, obsessive-compulsive disorder or environmental toxins; mild traumatic brain injury; or carbon monoxide poisoning (claimed).
Dwg.0/0
FS CPI
FA AB; DCN
MC CPI: **B04-L02**; B07-B03; B10-A17; B10-A22; B14-J01A4; B14-K01; B14-M01; B14-N16; B14-S04; **B14-S08**
TECH UPTX: 20010625
TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Method: Preferably 0.12-3 g **carnitine**, particularly acetyl-L-**carnitine**, is administered with 0.25-1.5 g **antioxidant**, preferably R-alpha-lipoic acid. The **coenzyme Q**, preferably **coenzyme Q10**, is administered in an amount of 10-500 mg/day, and **creatine** in an amount of 1-3g/day.

L122 ANSWER 3 OF 7 WPIX COPYRIGHT 2002 DERWENT INFORMATION LTD
AN 2001-281582 [29] WPIX
DNC C2001-085568
TI Food bar with antiaging properties comprises **antioxidant** and

carnitine to restore age-related mitochondrial function and metabolic activity in older subjects and **carbohydrate**, total **fat** and flavors.
DC B05 C03 D13
IN HAMILTON, N
PA (JUVE-N) JUVENON CORP
CYC 21
PI WO 2001021208 A1 20010329 (200129)* EN 19p A61K047-00
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
W: AU CA JP
AU 2000078282 A 20010424 (200141) A61K047-00
ADT WO 2001021208 A1 WO 2000-US24803 20000908; AU 2000078282 A AU 2000-78282 20000908
FDT AU 2000078282 A Based on WO 200121208
PRAI US 2000-223465P 20000807; US 1999-156028P 19990923
IC ICM A61K047-00
AB WO 200121208 A UPAB: 20010528
NOVELTY - 75 g Food bar with anti-aging properties comprises:
(a) **antioxidant**;
(b) **carnitine** to contribute to restoration of age-related mitochondrial function and metabolic activity in older individuals;
(c) **carbohydrate** in an amount to provide 100 calories;
(d) total **fat** in an to provide 50 calories and
(e) flavors.
ACTIVITY - Anabolic..
MECHANISM OF ACTION - None given.
USE - The food bar is used to provide anti-aging properties (claimed) and as a nutritional supplement to increase energy and stamina, particularly in subjects with deficient mitochondrial metabolism. The food bar is used to treat age-related decline in mitochondrial function that results in less energy and other signs of aging.
ADVANTAGE - The food bar increases energy and stamina with fewer calories.
Dwg.0/0
FS CPI
FA AB; DCN
MC CPI: B04-B01B; B04-D01; B05-A01B; B07-B03; B10-A06; B10-A17; B10-A22; B14-E11; C04-B01B; C04-D01; C05-A01B; C07-B03; C10-A06; C10-A17; C10-A22; C14-E11; D03-H01
TECH UPTX: 20010528
TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred composition: (a) Comprises R-alpha-lipoic acid in an amount of 0.25-1.5 g. (b) Comprises Alcar (RTM: acetyl-L-**carnitine**) in an amount of 0.5-3 g.
The composition also comprises **coenzyme Q**, preferably 100 mg of **coenzyme Q10**, or an effective amount of **creatine** (sic), preferably 5 g. The composition contains water to solubilize (a)-(e) to provide a nutritional beverage.
The composition is in the form of a dried antiaging beverage mix.

L122 ANSWER 4 OF 7 WPIX COPYRIGHT 2002 DERWENT INFORMATION LTD
AN 2001-281427 [29] WPIX
DNC C2001-085506
TI Reduced particle sized L-**carnitine** useful as dietary supplements, as a cofactor for weight control, dietary supplement for sport nutrition, vegetarian nutrition, animal nutrition or veterinary nutrition.
DC B05 D13
IN HASSEN, K
PA (HASS-I) HASSEN K
CYC 94
PI WO 2001017525 A1 20010315 (200129)* EN 15p A61K031-205
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE

SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2000073470 A 20010410 (200137) A61K031-205
ADT WO 2001017525 A1 WO 2000-US24279 20000905; AU 2000073470 A AU 2000-73470 20000905
FDT AU 2000073470 A Based on WO 200117525
PRAI US 1999-158245P 19991008; US 1999-152240P 19990903
IC ICM A61K031-205
AB WO 200117525 A UPAB: 20010528
NOVELTY - L-**carnitine** with a particle size such that it passes through a 100 USBS mesh sieve (I), is new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:
(1) a method for preparing (I) comprises
(i) subjecting (I) to size reduction; and
(ii) subjecting the size-reduced (I) to sieving through a 100 USBS mesh sieve and selecting that portion which passes through the sieve.
(2) a composition comprising (I) and a excipient or carrier (II).
ACTIVITY - Anoretic
No biological data give.
MECHANISM OF ACTION - None given.
USE - The invention is useful as a dietary supplements, as a cofactor for weight control, and as a dietary supplement for sport nutrition, vegetarian nutrition, animal nutrition and veterinary nutrition. It especially for facilitating the metabolism of **lipids**.
ADVANTAGE - The reduced size L-**carnitine** exhibits reduced hygroscopicity and increased bioavailability upon oral administration. The compound of the invention is certified 'BSE Safe' since it contains no animal products and is based on chemical synthesis, there is an avoidance of potential health risks and unnecessary consumption of unknown organisms, it requires no reworking (regranulation conditioning), and has low production costs, labor and environmental exposure.
Dwg.0/0
FS CPI
FA AB; DCN
MC CPI: B05-A01B; B10-A22; B10-C02; B14-E11; B14-F06; **D03-G**
TECH UPTX: 20010528
TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Composition: (I) is selected from L-**carnitine**, alkanoyl L-**carnitines**, or their salts. Compositions can further comprise hydroxycitric acid, Coenzyme Q10, chromium picolinate, resveratrol, **antioxidants**, vitamins, omega 3 acids or gamma-linolenic acid.

L122 ANSWER 5 OF 7 WPIX COPYRIGHT 2002 DERWENT INFORMATION LTD
AN 2001-159590 [16] WPIX
DNC C2001-047495
TI Composition for reducing muscle fatigue comprising L-**carnitine** and **creatinol** phosphate.
DC B05 D13
IN CAVAZZA, C
PA (SIGT) SIGMA-TAU HEALTHSCIENCE SPA
CYC 92
PI WO 2001006873 A1 20010201 (200116)* EN 16p A23L001-302
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2000064687 A 20010213 (200128) A23L001-302
ADT WO 2001006873 A1 WO 2000-IT308 20000721; AU 2000064687 A AU 2000-64687 20000721
FDT AU 2000064687 A Based on WO 200106873
PRAI IT 1999-RM467 19990723
IC ICM A23L001-302
ICS A61K031-205
AB WO 200106873 A UPAB: 20010323
NOVELTY - A dietary supplement or medicament for the prevention and

treatment of muscular energy deficiencies, asthenia, muscle fatigue, heart fatigue and post-infarct conditions comprises L-**carnitine** and/or at least one alkanoyl L-**carnitine** and **creatinol** phosphate.

DETAILED DESCRIPTION - A composition comprises:

(a) at least one **carnitine** selected from L-**carnitine**, acetyl L-**carnitine**, propionyl L-**carnitine**, butyryl L-**carnitine**, valeryl L-**carnitine**, and isovaleryl L-**carnitine**, or a salt; and

(b) **creatinol** phosphate or a salt.

ACTIVITY - Relaxant.

MECHANISM OF ACTION - **Carnitine** helps in the formation of Adenosine Triphosphate (ATP) and have **anti-oxidant** activity; **creatinol**-phosphate helps in ATP synthesis.

USE - For treating muscular energy deficiencies, asthenia, muscle fatigue, heart fatigue, and post-infarct conditions, and for enhancing sporting performances (all claimed).

ADVANTAGE - L-**carnitine** and **creatinol** phosphate act synergistically e.g. Adenosine Triphosphate (ATP) concentration in rabbit papillary muscle before hypoxia was 1.49, and 0.39 mol/g tissue after hypoxia, in the control. The corresponding figures for rabbits treated with 100 mg/kg L-**carnitine** alone were 1.53 and 0.48; with 100 mg/kg **creatinol** phosphate alone were 1.55 and 0.68; with L-**carnitine** and **creatinol** phosphate together were 1.60 and 1.18, showing the synergistic effect. Using **creatinol** -phosphate instead of **creatine** phosphate provides increased stability and tolerability, and allows for oral administration.

Dwg.0/0

FS CPI
FA AB; DCN
MC CPI: B05-B01P; B10-A17; B10-A22; B12-M07; B12-M11B; B12-M11C; B12-M11D; B14-J05A; B14-S09; D03-H01T2
TECH UPTX: 20010323

TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred composition: the weight ratio of (a):(b) is from 1:0.1 to 1:1. The salt is a chloride, bromide, iodide, aspartate, acid aspartate, citrate, acid citrate, tartrate, phosphate, acid phosphate, fumarate, acid fumarate, **glycerophosphate**, glucose phosphate, lactate, maleate, acid maleate, orotate, acid oxalate, sulfate, acid sulfate, trichloroacetate, trifluoroacetate, or methane sulfonate. The composition further comprises vitamins, coenzymes, mineral substances, **antioxidants**, glucides, **aminoacids** and **proteins**. Preferred dosage form: solid, semi-solid or liquid, in the form of tablets, lozenges, pills, capsules, granulates, syrups, vials or drops (all claimed).

L122 ANSWER 6 OF 7 WPIX COPYRIGHT 2002 DERWENT INFORMATION LTD
AN 2000-000331 [01] WPIX
DNC C2000-000116
TI Reducing appetite and body weight, especially for treating obesity, by administration of alpha-lipoic acid.
DC B05
IN DEAN, J; PISCHEL, I; SCHUHBAUER, H; VON SEYERL, J; WEISS, S
PA (SUDD) SKW TROSTBERG AG
CYC 25
PI DE 19818563 A1 19991028 (200001)* 7p A61K031-385
WO 9955331 A1 19991104 (200001) DE A61K031-385
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
W: CA CZ HU JP NO PL US
ADT DE 19818563 A1 DE 1998-19818563 19980425; WO 9955331 A1 WO 1999-EP2776 19990423
PRAI DE 1998-19818563 19980425
IC ICM A61K031-385
AB DE 19818563 A UPAB: 20000105

NOVELTY - The use of R- and/or S- alpha -lipoic acid (including the racemate) and/or its salts is claimed for reducing appetite and/or reducing body weight.

ACTIVITY - Anorectic; antiobesity; metabolic.
MECHANISM OF ACTION - **Coenzyme** in oxidative decarboxylation of alpha -ketocarboxylic acids; **antioxidant**; regeneration of vitamin C, vitamin E, glutathione and **coenzyme Q10**.
USE - Specifically for treatment of obesity, especially in humans having a body mass index (BMI) of above 25 kg/m2 (claimed).
ADVANTAGE - alpha -Lipoic acid is a natural product which has an excellent anorectic effect, is free of harmful side-effects and is suitable for long-term use.
Dwg.0/2
FS CPI
FA AB; DCN
MC CPI: B07-B03; B07-D03; B07-D05; B07-D11; B07-E03; B14-E12
TECH UPTX: 20000105
TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Salts: The salts of lipoic acid contain alkali or alkaline earth metals or Group III-VI non-transition elements. The salt forming agent is specifically an alkali metal hydroxide, alkaline earth metal hydroxide, ammonium hydroxide, amine of formula (II):
R1-R3 = H, 1-4C alkyl, or 1-4C oxyalkyl), 2-6C alkylene diamine, 4-6C cyclic amine, basic **aminoacid** or aminocarboxylic acid derivative.
Especially the amine is mono- or diethanolamine, 1-aminopropanol or 2-amino-2-(hydroxymethyl)-1,3-propanediol; the diamine is hexamethylene diamine; the cyclic amine is piperidine, piperazine, pyrrolidine or morpholine; the basic **aminoacid** is lysine or arginine; and the aminocarboxylic acid derivative is **creatine**, **carnitine**, ornithine, choline or taurine.

L122 ANSWER 7 OF 7 WPIX COPYRIGHT 2002 DERWENT INFORMATION LTD
AN 1996-400318 [40] WPIX
DNC C1996-125752
TI Feed additive for poultry for improving rate of growth and survival - comprises mixt. of **carnitine** chloride, citrate, glucose, vitamin C and magnesium oxide.
DC B02 B05 C01 C03 D13
IN BORYAEV, G I; GALOCHKINA, V P; KISELEV, A F
PA (GALO-I) GALOCHKINA V P
CYC 1
PI RU 2050793 C1 19951227 (199640)* 5p A23K001-16 <--
ADT RU 2050793 C1 RU 1993-33519 19930629
PRAI RU 1993-33519 19930629
IC ICM **A23K001-16**
AB RU 2050793 C UPAB: 19961104
Feed additive for poultry comprises a biologically active mixt. of 17.2 wt.% **carnitine** chloride, 25.8 wt.% citrate, 11.6 wt.% glucose, 2.3 wt.% vitamin C and 43.1 wt.% magnesium oxide (calculated per magnesium), which is added in an amt. of 579.3 mg/kg to a standard feed mixt., in conjunction with 0.3 mg/ kg of a selenopyran of formula (I) (calculated per selenium).
USE - The feed additive is used on young chicks during the first to the tenth days of their lives.
ADVANTAGE - The method increases survival rate of chicken by 7.04%, during the early stages of their growth which may take place under stressful conditions. It also increases the rate of growth and improves the quality of meat. The use of **carnitine** stimulates liq. acid transport through cell membranes, enhances **lipid** metabolism and maximises the use of excess accumulated **lipids** and **fat** to satisfy demands in energy. Selenopyran is a source of selenium, a known **antioxidant** used to reduce the formation of highly reactive free radicals and to activate the glutathione-peroxidase enzyme which in turn neutralises these radicals.
Dwg.0/0
FS CPI
FA AB; GI; DCN
MC CPI: B03-F; C03-F; B05-A01B; C05-A01B; B05-B01; C05-B01; B10-A07; C10-A07;

B10-A21; C10-A21; B10-C02; C10-C02; B14-S12; C14-S12; **D03-G01**

=> fil agricola
FILE 'AGRICOLA' ENTERED AT 08:20:29 ON 08 JAN 2002

FILE COVERS 1970 TO 7 Dec 2001 (20011207/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L134 ANSWER 1 OF 4 AGRICOLA
AN 2001:32698 AGRICOLA
DN IND22436384
TI The clinical and metabolic effects of rapid weight loss in obese pet cats and the influence of supplemental oral L-**carnitine**.
AU Center, S.A.; Harte, J.; Watrous, D.; Reynolds, A.; Watson, T.D.G.; Markwell, P.J.; Millington, D.S.; Wood, P.A.; Yeager, A.E.; Erb, H.N.
AV DNAL (SF601.J65)
SO Journal of veterinary internal medicine, Nov/Dec 2000. Vol. 14, No. 6. p. 598-608
Publisher: Lakewood, CO : American College of Veterinary Internal Medicine.
CODEN: JVIMEM; ISSN: 0891-6640
NTE Includes references
CY Colorado; United States
DT Article
FS U.S. Imprints not USDA, Experiment or Extension
LA English
CC L600 Animal Physiology and Biochemistry; L500 Animal Nutrition
CT **amino acids**; blood chemistry; blood plasma; **carnitine**; cat foods; catabolism; cats; fatty liver; **feed additives**; obesity; weight losses
RN **541-15-1** (CARNITINE)
541-15-1 (L-CARNITINE)
65072-01-7 (AMINO ACIDS)

L134 ANSWER 2 OF 4 AGRICOLA
AN 2001:30834 AGRICOLA
DN IND22433957
TI Effects of L-**carnitine** on the nutritive value of extruded full-fat soybean in weaned pigs.
AU Piao, X.S.; Kim, J.H.; Jin, J.; Kim, J.D.; Lee, J.H.; Shin, I.S.; Han, I.K.
AV DNAL (SF55.A78A7)
SO Asian-Australasian journal of animal sciences, Sept 2000. Vol. 13, No. 9. p. 1263-1271
Publisher: Seoul, Korea : AAAP and Korean Society of Animal Nutrition.
CODEN: AJASEL; ISSN: 1011-2367
NTE Includes references
CY Korea, Republic of
DT Article
FS Non-U.S. Imprint other than FAO
LA English
CC L500 Animal Nutrition; L100 Animal Production; R100 Feed Processing and Storage
CT **amino acids**; blood plasma; blood sugar; **carnitine**; chemical composition; cholesterol; diets;

digestibility; extrusion; **feed additives**; feed conversion; feed intake; liveweight gain; nutritive value; pigs; soybeans; urea
RN 57-13-6 (UREA)
57-88-5 (CHOLESTEROL)
541-15-1 (CARNITINE)
541-15-1 (L-CARNITINE)
65072-01-7 (AMINO ACIDS)

L134 ANSWER 3 OF 4 AGRICOLA
AN 2000:10403 AGRICOLA
DN IND22024095
TI Nutritional ergogenic aids and exercise performance.
AU Maughan, R.J.
CS University Medical School, Foresterhill, Aberdeen, UK.
AV DNAL (QP141.A1N87)
SO Nutrition research reviews, Dec 1999. Vol. 12, No. 2. p. 255-280
Publisher: Wallingford, Oxon, U.K. : CAB International
CODEN: NREREX; ISSN: 0954-4224
NTE Includes references
CY England; United Kingdom
DT Article; Law
FS Non-U.S. Imprint other than FAO
LA English
CC T300 Diet and Diet-related Diseases
CT **amino acids**; **antioxidants**; athletes; athletic performance; bicarbonates; caffeine; **carnitine**; chromium; **creatine**; dietary **protein**; energy metabolism; exercise; glutamine; picolinic acid; supplements
RN **57-00-1** (CREATINE)
58-08-2 (CAFFEINE)
98-98-6 (PICOLINIC ACID)
541-15-1 (CARNITINE)
7440-47-3 (CHROMIUM)
65072-01-7 (AMINO ACIDS)
56-85-9Q, 6899-04-3Q, 26700-71-0Q (GLUTAMINE)

L134 ANSWER 4 OF 4 AGRICOLA
AN 1998:82736 AGRICOLA
DN IND21806647
TI Antioxidant supplementation in prevention and treatment of immune dysfunction and oxidation induced by murine aids in old mice.
AU Lee, J.; Jiang, S.; Liang, B.; Inserra, P.; Zhang, Z.; Solkoff, D.; Watson, R.R.
CS University of Arizona, Tucson, AZ.
AV DNAL (QP141.A1N88)
SO Nutrition research, Feb 1998. Vol. 18, No. 2. p. 327-339
Publisher: New York, N.Y. : Elsevier Science Inc.
CODEN: NTRSDC; ISSN: 0271-5317
NTE In the special festschrift issue: to honor the academic achievements of Dr. Ranjit Kumar Chandra on his 60th birthday, February 2, 1998 / edited by S. Denduluri, E. O'Brien, Y. Bryne and G. Ramchandani.
Includes references
CY New York (State); United States
DT Article
FS U.S. Imprints not USDA, Experiment or Extension
LA English
AB Old female C57BL/6 mice were infected with LP-BM5 retrovirus which caused murine AIDS with supplementatin. Multiple antioxidants significantly normalized Th1 (IL-2) and Th2 (IL-4, IL-6) cells' cytokine production in vitro with restoration of T- and B-cell mitogenesis. It also restored hepatic vitamin E level, which had been reduced by retrovirus infection. To assert whether the amount of retrovirus inoculum would accelerate development of immune dysfunction, some mice were injected with three times the usual infectious dose. There was no significant difference in immune parameters nor was premature death accelerated. Supplementation for 1.5 months begun as murine AIDS was developing, did not significantly

prevent dysfunction in cytokine secretion, loss of hepatic vitamin E, nor reduction in T- and B-cell mitogenesis in mice given either infectious dose level.

CC T300 Diet and Diet-related Diseases; T200 Physiology of Human Nutrition; X380 Human Medicine, Health and Safety

CT acetylcysteine; acquired immune deficiency syndrome; aging; alpha-tocopherol; animal models; **antioxidants**; **ascorbic acid**; b lymphocytes; beta-carotene; bioflavonoids; body weight; **carnitine**; cytokines; death; diet; disease prevention; dosage effects; experimental infections; female animals; immunity; interleukins; liver; lymphocyte transformation; magnesium; mice; old age; retinol; selenium; supplements; t lymphocytes; tumor necrosis factor; **ubiquinones**; vitamin e; zinc

RN 59-02-9 (.ALPHA.-TOCOPHEROL)
68-26-8 (RETINOL)
541-15-1 (CARNITINE)
616-91-1 (ACETYLCYSTEINE)
1339-63-5 (UBIQUINONES)
1406-18-4 (VITAMIN E)
7440-66-6 (ZINC)
7782-49-2 (SELENIUM)
50-81-7Q, 62624-30-0Q (ASCORBIC ACID)
7235-40-7Q, 52765-84-1Q (.BETA.-CAROTENE)

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(FILE 'HOME' ENTERED AT 07:00:54 ON 08 JAN 2002)
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 07:01:06 ON 08 JAN 2002
E HAMILTON N/AU
L1 21 S E3,E5
L2 3 S E19,E20
E JUVENON/PA,CS
L3 3 S E3-E8
L4 24 S L1-L3

FILE 'REGISTRY' ENTERED AT 07:08:40 ON 08 JAN 2002
L5 1 S 1200-22-2
E C8H14O2S2/MF
L6 17 S E3 AND S2C3/ES
L7 13 S L6 AND 3
L8 6 S L7 AND PENTANOIC
L9 5 S L8 NOT LABELED
SEL RN
L10 133 S E1-E5/CRN
L11 34 S L10 AND SALT
L12 15 S L11 NOT COMPD
L13 13 S L12 AND 1/NR
L14 3 S 541-15-1 OR 541-14-0 OR 406-76-8
L15 41 S (541-15-1 OR 541-14-0 OR 406-76-8)/CRN
L16 22 S L15 NOT COMPD
L17 1 S 303-98-0
L18 1 S 57-00-1

FILE 'HCAPLUS' ENTERED AT 07:17:21 ON 08 JAN 2002
L19 1395 S L9 OR L13
L20 41518 S ANTIOXIDANT#/CW
L21 93716 S ANTIOXID? OR ANTI OXID?
L22 1533 S THIOCTIC ACID OR ALPHA LIPOIC ACID
L23 2189 S LIPOIC ACID
L24 96356 S L19-L23
L25 3983 S L14
L26 7730 S CARNITINE
L27 8373 S ?CARNITIN?

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L28         191 S L24 AND L25-L27

     FILE 'REGISTRY' ENTERED AT 07:20:45 ON 08 JAN 2002
L29           1 S 3040-38-8
                E C9H17NO4/MF
L30          11 S E3 AND PROPANAMINIUM AND ACETYLOXY
L31          10 S L30 AND 2 AND 3
L32           3 S L31 NOT (D/ELS OR 13C# OR 11C# OR LABELED)
                SEL RN
L33           6 S E1-E3/CRN
L34           1 S L33 AND C59H90O4
L35           1 S L33 AND CL
L36           4 S L29,L32,L35

     FILE 'HCAPLUS' ENTERED AT 07:24:31 ON 08 JAN 2002
L37          47 S L36 AND L24
L38           0 S L34 AND L24
L39           1 S L34
L40         191 S L28,L37
L41        1686 S COENZYME Q

     FILE 'REGISTRY' ENTERED AT 07:29:04 ON 08 JAN 2002
                E COENZYME /CN
                E COENZYME Q/CN
L42           1 S E3
L43          11 S E7,E10,E22,E24,E25,E31,E32,E35,E36,E37,E13
L44          12 S L42,L43
                SEL RN
L45          33 S E1-E12/CRN
L46          12 S L17,L44

     FILE 'HCAPLUS' ENTERED AT 07:34:03 ON 08 JAN 2002
L47          35 S L44 AND L40
L48          61 S (COENZYME OR CO ENZYME OR COE#) AND L40
L49          38 S L48 AND Q##
L50           8 S L40 AND L41
L51          44 S L47,L49,L50
L52          14 S L51 AND (L18 OR CREATIN?)
                E UBIQUINONE/CT
                E E8+ALL
L53        4296 S E6+NT
L54        2674 S E6/BI
L55        6781 S UBIQUINONE
L56          42 S L40 AND L53-L55
L57          49 S L51,L56
L58          15 S L57 AND (L18 OR CREATIN?)
L59          15 S L52,L58
L60           7 S L57 AND (CARBOHYDRATE OR ?SACCHARID?)
L61          21 S L57 AND (PROTEIN OR AMINOACID OR AMINO ACID)
L62          13 S L57 AND (FAT OR OIL OR ?GLYCER?)
L63           0 S L57 AND (?FIBER? OR ?FIBRE? OR ?FIBROUS?)
L64           0 S L57 AND ROUGH?
L65           7 S L60 AND L61,L62
L66           4 S L65 AND (17 OR 18)/SC,SX
L67           6 S L60-L62 AND L59
L68           5 S L67 AND (17 OR 18)/SC,SX
L69           7 S L66,L68
L70           3 S L4 AND L40
L71           3 S L70 AND L57
L72          10 S L69,L71
L73           8 S L72 AND L59
L74           2 S L72 NOT L73
L75          29 S L57 AND (17 OR 18)/SC,SX
L76          20 S L75 NOT L72
L77           5 S L76 AND (13 OR 14)/SC,SX
L78          15 S L76 NOT L77
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L79          10 S L78 NOT (TOPICAL? OR SPLEEN OR COSMETIC? OR PARADIGM)/TI
L80           9 S L79 NOT FATTY/TI
L81          17 S L73,L80
L82          15 S L81 AND L19,L14,L17,L18,L44
L83          17 S L81 AND (LIPOIC OR THIOCTIC OR TIOCTIC OR ?CARNITIN? OR UBIQU
L84          17 S L81-L83
L85           3 S L4 AND L84
L86          17 S L84,L85
                SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 07:54:30 ON 08 JAN 2002
L87           5 S E1-E5

     FILE 'REGISTRY' ENTERED AT 07:55:16 ON 08 JAN 2002

     FILE 'HCAPLUS' ENTERED AT 07:55:35 ON 08 JAN 2002

     FILE 'WPIX' ENTERED AT 07:56:22 ON 08 JAN 2002
L88         379 S L22 OR L23 OR TIOCTIC ACID
                E THIOCTIC ACID/DCN
                E E3+ALL
L89         422 S E2 OR L88
L90       27914 S ANTIOXID? OR ANTI OXID?
L91        3260 S (D03-H01P OR  B14-S08 OR C14-S08)/MC
L92       28991 S L90,L91
L93          71 S L92 AND ?CARNITIN?
                E CARNITINE/DCN
                E E3+ALL
L94         115 S E2
L95          82 S E6
L96          22 S E12
L97          14 S E16
L98           3 S E22
L99         171 S E24
                E ACETYLCARNITINE/DCN
                E ACETYL CARNITINE/DCN
                E ACETYL-CARNITINE/DCN
                E E8+ALL
L100          2 S E2
L101         44 S L92 AND L94-L100
L102         75 S L93,L101
L103         20 S L102 AND (COENZYM? OR CO ENZYM?)(L)Q##
L104          1 S L102 AND UBIQUIN?
L105          6 S L102 AND (B04-B02C1 OR C04-B02C1 OR B04-L02 OR C04-L02)/MC
                E COENZYME/DCN
                E E7+ALL
L106        188 S E2
L107          4 S E4
L108          4 S E6
L109         12 S L102 AND L106-L108
L110         22 S L103,L104,L105,L109
L111         15 S L102 AND ?CREATIN?
                E CREATINE/DCN
                E E3+ALL
L112          7 S L102 AND (E2 OR 0118/DRN)
L113         15 S L111,L112
L114          8 S L110 AND L113
L115          3 S L102 AND D03-G?/MC
L116         10 S L114,L115
L117         61 S L102 AND (CARBOHYDRATE OR PROTEIN OR AMINOACID OR AMINO ACID
L118          3 S L102 AND A23K/IC,ICM,ICS,ICA,ICI
L119          9 S L116 AND L117,L118
L120         11 S L116,L118,L119
L121          8 S L120 NOT (AUTOIMMUNE OR DYSTROPHY OR PICOLINATE)/TI
L122          7 S L121 NOT DIALYSIS
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     FILE 'WPIX' ENTERED AT 08:10:27 ON 08 JAN 2002

     FILE 'AGRICOLA' ENTERED AT 08:11:14 ON 08 JAN 2002
L123          70 S L88 OR L9 OR L13
L124           0 S L123 AND (L14 OR L36 OR CARNITIN? OR ACETYLCARNITIN?)
L125           6 S L123 AND  (L17 OR COENZYM? OR CO ENZYM? OR UBIQUIN?)
                 E ANTIOXIDANT/CT
                 E E4+ALL
L126        7869 S E2+NT
L127        2519 S E18+NT
L128       10346 S L123,L126,L127
L129          20 S L128 AND (L14 OR L36 OR CARNITIN? OR ACETYLCARNITIN?)
L130           5 S L129 AND (PROTEIN OR AMINO ACID OR AMINOACID OR CARBOHYDRATE
L131           4 S L129 AND (L18 OR CREATIN? OR L17 OR L46 OR UBIQUIN? OR COENZY
L132           2 S L131 NOT (CHLOROPLAST OR ASCORBIC)/TI
L133           6 S L130,L132
L134           4 S L133 NOT (ALZHEIMER OR ASCORBIC)/TI

     FILE 'AGRICOLA' ENTERED AT 08:20:29 ON 08 JAN 2002

     FILE 'VETB, VETU' ENTERED AT 08:20:55 ON 08 JAN 2002
L135          13 S L88
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L Number	Hits	Search Text	DB	Time stamp
1	1	"6080788" .pn.	USPAT; US-PGPUB	2002/01/08 12:52
4	1	("6080788" .pn.) and mitochondrial	USPAT; US-PGPUB	2002/01/08 15:38
7	1	"6335361" .pn.	USPAT; US-PGPUB	2002/01/08 13:19
10	1	"4346107" .pn.	USPAT; US-PGPUB	2002/01/08 13:19
13	1	"3810994" .pn.	USPAT; US-PGPUB	2002/01/08 13:20
16	1	"6063432" .pn.	USPAT; US-PGPUB	2002/01/08 13:21
19	1	"6110511" .pn.	USPAT; US-PGPUB	2002/01/08 13:22
22	2	"2000011968"	DERWENT	2002/01/08 13:23
24	0	"0011968" and cavazza	DERWENT	2002/01/08 13:23
23	65	"0011968"	DERWENT	2002/01/08 13:23
25	93	carnitine and lipoic	USPAT; US-PGPUB	2002/01/08 13:40
28	93	carnitine and (lipoic adj acid)	USPAT; US-PGPUB	2002/01/08 13:45
31	74	carnitine and (lipoic adj acid)and alpha	USPAT; US-PGPUB	2002/01/08 13:45
34	25	carnitine and (alpha adj lipoic adj acid)and alpha	USPAT; US-PGPUB	2002/01/08 13:45
37	25	carnitine and (alpha adj lipoic adj acid)	USPAT; US-PGPUB	2002/01/08 13:49
40	9	carnitine and (alpha adj lipoic adj acid)and carbohydrate	USPAT; US-PGPUB	2002/01/08 13:49
43	16	l-carnitine and (alpha adj lipoic)	USPAT; US-PGPUB	2002/01/08 15:39
46	13	l-carnitine and (alpha adj lipoic)and (animal or pet)	USPAT; US-PGPUB	2002/01/08 15:39

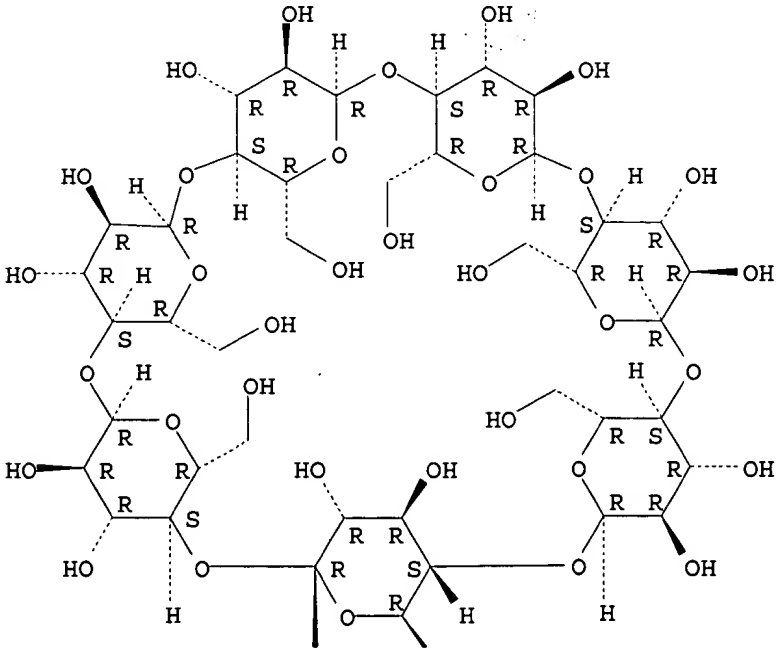
L1 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2002 ACS
RN 169250-24-2 REGISTRY
CN .beta.-Cyclodextrin, compd. with (R)-1,2-dithiolane-3-pentanoic acid (9CI)
(CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,2-Dithiolane-3-pentanoic acid, (R)-, compd. with .beta.-cyclodextrin (9CI)
OTHER NAMES:
CN **(R)-.alpha.-Lipoic acid-.beta.-cyclodextrin complex**
FS STEREOSEARCH
MF C42 H70 O35 . x C8 H14 O2 S2
SR CA
LC STN Files: CA, CAPLUS, TOXLIT

CM 1

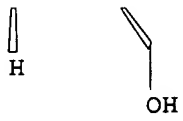
CRN 7585-39-9
CMF C42 H70 O35

Absolute stereochemistry.

PAGE 1-A



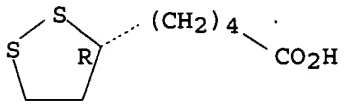
PAGE 2-A



CM 2

CRN 1200-22-2
CMF C8 H14 O2 S2

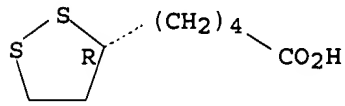
Absolute stereochemistry. Rotation (+).



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L1 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2002 ACS
RN 1200-22-2 REGISTRY
CN 1,2-Dithiolane-3-pentanoic acid, (3R)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,2-Dithiolane-3-pentanoic acid, (R)-
CN 1,2-Dithiolane-3-valeric acid, (+)- (8CI)
OTHER NAMES:
CN (R)-(+)-.alpha.-Lipoic acid
CN **(R)-.alpha.-Lipoic acid**
CN (R)-Lipoic acid
CN .alpha.-(+)-Lipoic acid
CN .alpha.-Lipoic acid
CN d-Thioctic acid
CN Lipoic acid
CN R-(+)-Thioctic acid
FS STEREOSEARCH
MF C8 H14 O2 S2
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
BIOTECHNO, CA, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DIOGENES, DRUGNL, DRUGUPDATES, EMBASE, HODOC*, IFICDB, IFIUDB, IPA, MEDLINE, MRCK*, NAPRALERT, PROMT, TOXCENTER, TOXLIT, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

501 REFERENCES IN FILE CA (1967 TO DATE)
39 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
502 REFERENCES IN FILE CAPLUS (1967 TO DATE)

▸ your search results

xreferences

lecithin
A Dictionary of Food and Nutrition

inositol
A Dictionary of Food and Nutrition

sphingomyelins
A Dictionary of Food and Nutrition

phosphorus
A Dictionary of Food and Nutrition

phospholipins
A Dictionary of Food and Nutrition

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adjacent entries

phosphatidylethanolamine
phosphatidylinositol
phosphatidylserine
phospholipids (Also known as phosphatides and phospholipins)
phospholipins
phosphoproteins
phosphoric acid

phospholipids (Also known as phosphatides and phospholipins)

. Glycerol esterified to two molecules of fatty acid, one of which is commonly a polyunsaturated fatty acid. The third hydroxyl group is esterified to phosphate and one of a number of water-soluble compounds, including serine (phosphatidylserine), ethanolamine (phosphatidylethanolamine), choline (phosphatidylcholine, also known as lecithin), and inositol (phosphatidylinositol).

Cell membranes are a double layer of phospholipids with the fatty acid side-chains on the inside and the water-soluble compound esterified to the phosphate interacts with water. This is why phospholipids can be used to emulsify oils and fats in water and are commonly used in food manufacture as emulsifiers.

From the energy point of view they can be regarded as being equivalent to simple fats (triacylglycerols); they also provide a dietary source of choline and inositol, neither of which is a dietary essential.